

AN EXPLORATION OF THE EXPERIENCES OF CRITICAL INCIDENT NEGOTIATORS

by

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Abstract

Negotiation is an established strategy utilised by the police and Her Majesty's Prison and Probation Service to manage critical and serious incidents. Whilst the literature acknowledges the role of the negotiator to be stressful, little is known about the experience of stress and the coping strategies adopted by negotiators working in potentially high-pressure situations. This thesis aimed to address this gap in knowledge. Chapter 1 introduces the wider literature regarding the development and use of negotiation as a management strategy, and the key constructs relevant to the thesis. Chapter 2 presents a systematic review of the existing literature examining negotiator stress, coping, and mechanisms of support. The findings highlighted a dearth of knowledge in this area, particularly regarding the experience of negotiators working in a prison setting. In order to advance current knowledge, Chapter 3 presents an empirical study exploring the sources and experiences of stress for prison officer negotiators; how they cope with the stress/pressure of the role; and their views of the support mechanisms available to them. Chapter 4 examines the psychometric properties of the Coping Inventory for Stressful Situations (Adult Version) (Endler & Parker, 1999) and considers the utility of the questionnaire in respect to research and forensic practice. Chapter 5 concludes the thesis with a summary of the main findings and provides recommendations for practice and avenues for further research.

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Glossary of Terms and Acronyms

CIN(s)	Critical incident negotiator(s)
CINn	Critical incident negotiation
Collusion/False hostage	A situation in which one or more prisoners are seemingly holding one or more prisoners against their will; however, they are in fact ‘willing hostages’.
Concerted indiscipline	An incident in which two or more prisoners act together in defiance of a lawful instruction or against the requirements of the regime of the establishment. The indiscipline may be active or passive (Parliamentary Archives, 2007).
CSU	Care and Separation Unit
EAP	Employee Assistance Programme
Gold commander	A senior manager providing strategic and operational oversight to a serious incident from an external location to the prison.
Hostage	When a person, or persons, are held against their will by another person or persons.
Incident at height	A situation where a prisoner(s) has climbed onto something which is off the floor. Typically, this involves climbing onto the external roof of a building or into internal roof spaces.
NA	Negotiation Advisor. A psychologist who provides advice and support at serious incidents.

NDTSG	National Dog and Technical Support Group. A team of specialist trained prison officers who provide technical and tactical support to silver and gold commanders.
Netting	Safety netting to prevent anyone falling from a wing landing to the floor.
NTRG	National Tactical Response Group. A team of specialist trained prison officers in dealing with serious incidents.
PRISMA-P	Preferred reporting items for systematic review and meta-analysis protocols
PTSD	Post-traumatic stress disorder
Railings	The railings that circle the landings on a residential prison wing.
Self-hostage	A perpetrator who has isolated him- or her-self by whatever means (e.g., barricaded in his/her cell).
Silver commander	Senior manager in charge of managing a serious incident from within the prison.
SORC	A framework for assessing the function of a behaviour. Data are collected relating to: <i>Setting Conditions</i> (intrapersonal and environmental factors), <i>Organism Variables</i> (previous behaviours, values, and beliefs), <i>Response</i> (the actual behaviour displayed) and <i>Consequences</i> (effects of the actions, notably the reinforcers).
Tornado	A team of specialist trained prison officers in riot intervention.

CHAPTER 1

INTRODUCTION

Introduction

The Munich Olympic Games in 1972 saw 11 Israeli athletes taken hostage by 13 Arab terrorists. Sadly, the ensuing police tactical intervention resulted in the loss of 22 lives (Schreiber, 1973, cited in Johnson, Thompson, Hall, & Meyer, 2018). This event, along with airline hijackings occurring around that time, prompted the New York Police Department to review its forceful and confrontational practices for dealing with hostage incidents (McMains & Mullins, 2015). Following a review of the psychological literature pertaining to negotiation techniques, principles were developed that advocated treating hostage situations as though they were a crisis for the hostage taker (Bolz & Hershey, 1979; Schlossberg, 1979). Crisis negotiation has since been described as the communication between a trained negotiator and the perpetrator(s), to achieve behavioural change, whilst minimising loss of life (Oostinga, 2017; St-Yves & Michaud, 2012). Crisis negotiation is now established as the first choice of intervention in hostage/crisis situations across western countries (Alexander & Klein, 2010). Since its inception, various models of negotiation have been developed (see Grubb, 2010, for a review of these models).

Negotiation is a team approach operating within a command structure. The literature in this field is dominated by work conducted in the United States of America (US) and United Kingdom (UK) which should be borne in mind when considering the literature discussed in this thesis. To provide some context to how negotiation operates in practice, it is useful to outline the command structure and teams involved. Police crisis negotiation team structure has been outlined by Strentz (2012) in the US and Grubb (2016) in the UK. The structures are broadly similar in that they are each led by a coordinating commander (known as the ‘silver commander’ in the UK) who assumes responsibility for the incident and is the decision-maker on how the incident will be managed. Whether the

incident is in the community, or within a prison setting, tactical intervention teams form part of the wider incident management team and will assist in the development of strategy and tactics. Other key personnel are tasked with managing the scene, log-keeping, and ensuring effective communication between the scene and the commander. Ideally, negotiators work in teams of three. In brief, Grubb (2016) detailed the roles as: the ‘Number 1’ (or primary) negotiator communicates directly with the perpetrator; the ‘Number 2’ (or secondary) negotiator supports the Number 1 by making suggestions on how to progress dialogue and moves information backwards and forwards between the Number 1 negotiator and the ‘Hostage Negotiator Coordinator’ (HNC). The HNC acts as the link between the negotiators and the commander. It is the HNC’s role to monitor the progress of negotiations, provide updates, and advise the commander on negotiation strategy. They also monitor the welfare of negotiators, checking they are fit to continue in the role.

The number one and number two roles operate similarly in UK prisons; however, the HNC role is replaced by a number three negotiator and a psychologist. The number three negotiator adopts a purely communication role. It is their role to act as a ‘runner’, passing information between the number two negotiator and the silver commander. Whilst psychologists are often used in police negotiations in the US (Fuselier, 1988; Hatcher, Mohandie, Turner, & Gelles, 1998; Stratton & Knowles, 1978; Wardlaw, 1983), they are used to a much lesser degree in UK police negotiations (Grubb, 2010). In comparison, psychologists are commonly involved in negotiation incidents in Her Majesty’s Prison and Probation Service (HMPPS) in the UK. These psychologists are HMPPS employees who volunteer for the role of negotiation advisor (NA) as an additional role to their day-to-day duties. The NA does not become directly involved in negotiations, rather they will use

psychological theory and knowledge to prepare perpetrator profiles and advise the silver commander on strategy and tactics. They will subsequently support negotiators in the implementation of the silver commander's strategy, and act as welfare support for all those involved in the incident. Further information regarding the selection, training and deployment procedures for NAs can be found in Chapter 3 (p. 81).

Different Terms to Define Negotiators and Negotiation Situations

There is currently no consistent term to describe negotiators or the situations in which negotiators are deployed. The three most commonly used terms are: 'hostage' (e.g., Norton & Petz, 2012), 'crisis' (e.g., Romano, 2003; Strentz, 2012) and 'critical incident' (e.g., Ireland, 2017; McMains & Mullins, 2015). It is useful to consider the definitions of these terms to assist in the understanding of negotiation incidents. A hostage incident is defined as "any incident in which people are being held by another person or persons against their will, usually by force or coercion, and demands are being made by the hostage taker" (McMains & Mullins, 2015, p. 16). In contrast, a crisis incident is not defined by what it *looks* like but rather why it occurs. Central to definitions of a crisis is the concept that a person's ability to cope has been exceeded. Carkhuff and Berenson (1977) define a crisis as a situation, which is perceived by an individual, as having obstacles that they cannot overcome; consequentially, the individual becomes overwhelmed. Finally, many different definitions of a critical incident now exist; however, Mitchell (1983), who coined the term 'critical incident', defined it as "any situation faced by emergency personnel that causes them to experience unusually strong emotional reactions which have the potential to interfere with their ability to function either at the scene or later" (p. 36). The problem with this definition is the requirement that an individual must experience "unusually strong

emotional reactions”. This could mean that the same incident could be considered critical for one person but not another, should they not experience the same level of emotion. The American Psychiatric Association (APA, 1994) provide a clearer definition in that it is not dependent on a subjective experience. According to the APA, critical incidents include the actual witnessing of, threat of, or causing of death, injury, extreme fear, or repulsion.

Originally known as hostage negotiators, over time it was noticed that negotiators were increasingly being deployed to personal crisis situations (e.g., domestic incidents and suicide intervention) where there was no hostage (McMains, 1988). To reflect this shift, the term crisis negotiator/negotiation was introduced (McMains & Mullins, 1996).

Thompson (2014) recently noted the lack of consistency in the use of these terms across different law enforcement associations in the US; for example, some agencies only use the term hostage, others only use the term crisis, while others use both, and some use neither. In a recent study of the types of police negotiator deployments in the UK, Grubb, Brown, Hall, and Bowen (2018) identified several categories which were sub-divided under the overarching categories of ‘*Crisis Negotiation Deployments*’ and ‘*Hostage Negotiation Deployments*’. Crisis negotiation categories included: ‘*Suicide Intervention*’; ‘*High-Risk Missing Persons*’; and ‘*Protest/Demonstration Liaison and Management*’. Hostage negotiation categories included: ‘*Hostage Taking*’; ‘*Domestic Siege (Involving Victim(s))*’ and ‘*Kidnap and Extortion*’. It could be argued that the *Protest/Demonstration Liaison and Management* category does not fit easily within a crisis definition as the protest events are pre-planned and the negotiator’s role is to discuss logistical issues with organisers, to ensure public safety. However, such incidents do have the potential to change from a peaceful protest/demonstration to a conflict situation where use of force and risk of harm are possibilities. If one considers that each type of incident that a negotiator

attends has the *potential* to develop into a critical incident, according to the APA's criteria, it is proposed that the term 'critical incident negotiator/negotiation' may be more fitting for the present day. For this reason, the term 'critical incident negotiator' (CIN) will be used in this thesis.

Stress

Several researchers have reported the stressful nature of the negotiator role (McMains & Mullins, 2015; Norton & Petz, 2012; Strentz, 2012). Understanding workplace stress is of importance given the negative impact that stress can have on the individual and organisation (Zeb, Saeed, & Ur Rehman, 2015). In the context of police and prison research, workplace stress has been associated with negative physical and psychological health outcomes for frontline officers. Specifically, research has suggested a link between occupational stress and: gastrointestinal problems (Karaffa & Koch, 2016); illnesses related to deficiencies in the immune system (Blum, 2000); problems with alcohol use (Swatt, Gibson, & Piquero, 2007; Ballenger et al., 2011); post-traumatic stress disorder (Weiss et al., 2010; Spinaris, Denhof, & Kellaway, 2012); low mood (Bourbonnais, Jauvin, Dussault, & Vezina, 2007); and decreased life satisfaction (Lambert, Hogan, & Altheimer, 2010). At the organisational level, stress has been associated with a decline in job performance (Finn, 2000; Shane, 2010), an increase in staff turnover (Lambert et al., 2010) and absenteeism (Dowden & Tellier, 2004). For these reasons it is important to understand the causes and experience of stress for CINs, so that remedial action can be taken if necessary.

According to Lazarus and Folkman (1984, p. 19), stress is "any situation in which internal demands, external demands, or both, are appraised as taxing or exceeding the

adaptive or coping resources of an individual or group”. Stressors have been defined as “environmental demands (i.e., stimuli) encountered by an individual” (Lazarus, 1999, p. 329). Lazarus and Folkman’s transactional model of stress is now well established in the stress literature (Lazarus & Folkman, 1984). This model conceptualises stress as encompassing: a stressor; the individual’s appraisal of it; coping; and the emotional response. Lazarus and Folkman elaborated that the way one appraises an event influences the number and type of coping responses that an individual will use; for example, if it is perceived as a threat, or as a challenge, and how controllable it is perceived to be.

Following a change in the direction of coping research, several researchers found the presence of positive emotion in the stress process (e.g., Bonanno & Keltner, 1997; Folkman, 1997; Folkman & Moskowitz, 2000). Following this development, Folkman and Moskowitz (2000, 2004) subsequently reviewed and updated Lazarus and Folkman’s (1984) model to include the positive impact as well as the negative impact of stress. This model purports that both positive and negative stress can co-occur and even be experienced by the same incident.

Coping Responses

Coping can be viewed as a response to an external stressful event (Billings & Moos, 1981; Folkman & Lazarus, 1980). Lazarus and Folkman’s (Folkman & Lazarus, 1980; Lazarus & Folkman, 1984) definition of coping has been widely accepted in the literature. Their definition sees coping as the thoughts and behaviours people use to manage the internal and external demands of a situation that has been appraised as stressful. As previously noted, the strategies an individual employs will be linked to their subjective appraisal of the situation as a threat or as a challenge (Lazarus & Folkman,

1984). Whilst researchers seem to agree on this point, there is a theoretical distinction in the literature between a focus on an individual as having a relatively stable coping style that they would use across different stressful situations (e.g., Carver, Scheier, & Weintraub, 1989; Endler & Parker, 1990a) and an individual using flexible coping strategies in response to the demands of the situation (Lazarus & Folkman, 1984).

A second theoretical debate in the coping literature relates to the categorisation of the many different coping strategies. Researchers have proposed several different dimensions on which to categorise coping strategies for which there is still no agreement. It is beyond the scope of this thesis to examine and critique all the proposed coping dimensions and interested readers are directed to Skinner, Edge, Altman, and Sherwood (2003) for a review. However, a brief overview of the most common dimensions is worth acknowledging to contextualise the construct of coping for this thesis.

Skinner et al. (2003) reported that the three most common coping dimensions are: problem- versus emotion-focused (Lazarus & Folkman, 1984); approach versus avoidance (Roth & Cohen, 1986); and behavioural versus cognitive (Latack & Havlovic, 1992). A further dimension is to consider coping strategies as either adaptive (healthy) or maladaptive (unhealthy) (Skinner et al., 2003). In the first dimension, problem-focused coping refers to managing or altering the problem that is causing distress (task-oriented), while emotion-focused coping refers to managing one's emotional response to the situation. The approach-avoidance dimension refers to an individual's movement toward or away from the threatening stimuli and the behavioural versus cognitive dimension refers to 'doing' (taking action) or 'thinking' (mental strategies and self-talk) strategies. Finally, Skinner et al. (2003) described adaptive ways of coping as being organised, flexible, and constructive. These ways of coping involve an active engagement with the stressor (e.g.,

planning and negotiation) or with one's own emotional reaction to it (e.g., seeking support or emotional expression). In comparison, maladaptive ways of coping are rigid and disorganised. According to Skinner et al. (2003), a prolonged use of maladaptive strategies such as helplessness, opposition, and social withdrawal can place one at risk of not being able to develop a repertoire of healthy coping strategies.

The problem with categorising coping strategies is that judgements are made as to the appropriateness of a strategy without considering situational factors. The consequence of this is some strategies are seen as superior to others; however, as any given situation is fluid, the effectiveness of a strategy is surely dependent on the situational factors at the time the strategy is adopted. Indeed, Lazarus and Folkman (1987) themselves pointed out that caution should be exercised in making sweeping generalisations about the functional, or dysfunctional, value of a coping strategy without considering contextual factors. DeLongis and Holtzman (2005) concur with this view reporting that the (mal)adaptiveness of a coping strategy will vary depending on the context, the nature of the stressor, the social context in which coping occurs, and the personality of the individual experiencing the stressful situation. Skinner et al. (2003) elaborated further that, as stressful situations are dynamic, a strategy that may have been adaptive at the beginning may be considered maladaptive as the incident progresses. In the context of the current thesis, then, it might be beneficial to use problem-focused strategies at the start of an incident, by organising the scene and making sure everyone is safe; however, as the incident progresses, it may prove more beneficial to adopt emotion-focused strategies to manage any negative thoughts and reduce physiological arousal.

One final point in respect of coping is the matter of support. Mechanisms of support are a pertinent resource that an individual can draw on as part of a coping

repertoire. It can be in the form of an organisational structure or informal via social support from co-workers, family, and friends. It has been suggested that social support is a useful resource that ‘assists’ in the coping process (Thoits, 1986). As one cannot rely on support being offered, individuals need to be willing to proactively seek help if/when required (Liang, Goodman, Tummala-Narra, & Weintraub, 2005). From a theoretical perspective, prominent models of help-seeking are conceptualised as a decision-making process with four stages: problem recognition and definition; the decision to seek help; the selection of a help provider; and acting out the help-seeking behaviour (Murray, 2005; Sato, Drennan, & Lings, 2017). These models highlight the importance of the individual being able to recognise that there is a difference between their current state (the degree to which their wants/needs are currently being met) and their desired state (how they would like their wants/needs met) (Cornally & McCarthy, 2011). Problem recognition is, therefore, crucial for the help-seeking process to be triggered.

Negotiation in Community and Prison Settings

Very little has been written about negotiation in a prison setting aside from details about specific incidents (e.g., Strentz, 2012); however, some non-empirical literature was found that discusses the differences between community and prison negotiation. McMains and Mullins (2015) considered there were few differences, identifying that: prison teams tend to be larger; incidents are more likely to be sieges; hostages are often co-workers or friends; and intelligence is readily available on the perpetrator(s). Romano (2003) identified what he considered to be several advantages of negotiation in correctional settings: 1. An immediate containment of the situation; 2. Access to background information and intelligence on the perpetrator(s); 3. Familiarity with the environment; 4.

Benefit of established positive staff-prisoner relationships; 5. The perpetrator's vulnerability to the use of force given their restricted access to weapons.

Romano (2003) also identified some disadvantages to addressing prison riots/barricades: 1. Restrictions on tactical entry given the contained environment; 2. Volatile group dynamics of the perpetrators; 3. Potential poor relationships between staff and prisoners; 4. Identifying the leader with whom to direct negotiations in multiple perpetrator situations. Again, this research is not empirically validated and is based on observation and opinion.

Aims of the Thesis

Research examining critical incident negotiation from the perspective of the negotiator is currently limited; however, a body of literature has begun to emerge with police negotiators. Given the impact of stress on performance, understanding the causes of stress and how the negotiator experiences stress is essential given the potential high stakes involved. Equally, understanding the coping styles/strategies, and support mechanisms negotiators use to manage stress, is of importance. The aims of this thesis are two-fold. First, to increase the knowledge base of the experience of CINs, specifically in relation to stress, coping, and support. Second, to expand current knowledge of negotiating to that of a prison setting. To fulfil these aims, the thesis incorporates three distinct pieces of work:

1. Chapter 2 presents a systematic review of the extant literature examining: coping styles; stressors; experience of stress; coping strategies adopted; and support mechanisms utilised by CINs. The findings are analysed through a narrative

synthesis. The implications of the findings are discussed in relation to practice and future research.

2. Taking forward recommendations from the systematic literature review, Chapter 3 presents an empirical study exploring the experiences of negotiators working in a prison setting. The study utilises a qualitative methodology to explore the experiences of prison officer negotiators, including their experience of incident-related stress, coping, and support. Thematic analysis identified five themes which are discussed in relation to the extant literature for police negotiators and the occupational literature for prison officer work.
3. Chapter 4 examines the psychometric properties of the Coping Inventory for Stressful Situations (Adult Version) (CISS; Endler & Parker, 1999). This inventory was critiqued as it is a coping assessment that could be used to measure the coping style(s) of CINs. The findings are discussed in relation to the inventory's utility for practice and research.

Finally, Chapter 5 draws together the findings from the previous chapters to provide a summary of the current understanding of the experience of stress, coping, and support for police and prison officer negotiators. The findings of the thesis are used to discuss the implications for practice and provide direction for future research.

CHAPTER 2

THE EXPERIENCE OF STRESS, COPING, AND SUPPORT AMONG CRITICAL INCIDENT NEGOTIATORS: A MIXED-STUDIES SYSTEMATIC REVIEW

Abstract

Critical incident negotiators are the spearhead of a team called upon to engage in dialogue with potentially unpredictable people, in unpredictable situations, to bring about a peaceful resolution. Critical incident negotiators work in highly charged environments where risk of significant injury, even death, are possibilities for those involved. It is unsurprising, therefore, that the job of the critical incident negotiator is ubiquitous with stress. This review systematically sought primary studies investigating the negotiation-related experience of stress, coping, and support for the critical incident negotiator. Primary studies investigating the general coping style of critical incident negotiators were also sought. A search of nine electronic databases, hand searching reference lists, contact with experts, and citation searching identified four qualitative and three quantitative studies that met the inclusion criteria. Quality assessment of the studies yielded scores ranging from 41% to 95%. Data were extracted, and a narrative synthesis was undertaken. The findings of the review indicate that stress is caused by internal and external sources to the critical incident negotiator and stress is experienced on a continuum from potentially damaging to health to being beneficial to the critical incident negotiator role. The coping strategies employed by critical incident negotiators, in general and in incident-related situations, were largely adaptive and the most favoured incident-related support mechanisms were identified. The strengths and limitations of the review are discussed and recommendations for practice and future research are made.

Introduction

The literature is unanimous that critical incident negotiation (CINn) is stressful (McMains & Mullins, 2015; Strentz, 2012). Being at the forefront of the critical incident management team, the critical incident negotiator (CIN) is particularly open to experiencing high levels of stress (Bohl, 1992), making it worthy of attention by researchers.

CINs are most likely to have a law enforcement or military background (McMains & Mullins, 2015) and can be called upon to intervene in a variety of situations; for example: domestic hostage situations; siege; barricades; international kidnapping; protest movements; and with individuals making threats to harm themselves (McMains & Mullins, 2015; Spence & Millott, 2016). The setting for negotiation incidents can therefore be in the negotiator's local vicinity, in prisons, across countries, or at sea (McMains & Mullins, 2015; Nieboer-Martini, Dolnik, & Giebels, 2012). The motivation of the suspect, or person in crisis, can be goal-oriented or in response to a specific event, and individual characteristics of the suspect, such as mental illness or personality disorder, may make interaction with them more complex (McMains & Mullins, 2010; Miller, 2007). As such, it is unsurprising that the CIN can experience stress from multiple sources as the incident evolves (Bohl, 1992; Norton & Petz, 2012).

Research with police (Regeher & LeBlanc, 2017), correctional officers (Rosine, 1992), and paramedics (LeBlanc et al., 2012), suggests high levels of stress can impair work performance for emergency response workers exposed to critical incidents. Considering lives may be at risk during a negotiation incident, understanding the sources and experience of stress for the CIN is of the utmost importance for maximising the chance of a successful outcome, and for ensuring the psychological wellbeing of the CIN.

Stress and the CIN

Mirabella and Trudeau (1981) were the first researchers to examine the emotional impact of negotiating on CINs. Twenty-three law enforcement negotiators from California completed a questionnaire designed to examine specific stress points, emotional effects, and negotiating procedures during an incident. Data were returned for a total of 29 incidents. It is not clear whether the findings reported are in relation to quantitative or qualitative data, or how the data were treated or analysed; however, Mirabella and Trudeau reported negotiators felt anger towards the hostage for their behaviour during negotiations in five incidents and eight negotiators reported feeling anger directed toward the suspect. The three main reasons for anger towards a hostage were due to them directing anger towards the police, crying or displaying panic, and questioning the police and/or negotiator competence.

Mirabella and Trudeau (1981) reported respondents experienced many feelings indicative of stress and, in some cases, multiple indicators were reported. Symptoms included: nervousness; rapid pulse; excessive perspiration; shaking; dehydration; chills; upset stomach; and headaches. Post incident, negotiators reported feelings of disappointment, anger, exhaustion, and failure; however, positive feelings of heroism, elation, relief, and satisfaction were also reported, though it is not known by how many negotiators, and it is assumed that these were after incidents that had ended peacefully.

The non-empirical literature based on first-hand accounts from police negotiators, and others directly involved in critical incident management, reports sources of stress for the CIN as emanating from tension, chaos, and disruption at the scene (Fagan, 2003; Lanceley, 1999); organisational issues to do with the structure of the crisis negotiation team and chain of command (Fagan, 2003); interactions with the tactical intervention team

(McMains & Mullins, 2010); direct contact with the suspect (Norton & Petz, 2012); and political, public, and media interest (McMains & Mullins, 2015). Physical stressors of fatigue (Lanceley, 1999) and nourishment (Norton & Petz, 2012) have also be highlighted.

Whilst Mirabella and Trudeau (1981) found some negotiators reported positive feelings following a stressful negotiation incident, commentaries and personal accounts from the non-empirical literature discuss stress as a negative event (e.g., Norton & Petz, 2012) with negative symptoms, such as: negative self-perception; loss of confidence; and disrupted sleep (Ricketts, 2002). Research has shown the negative impact of stress can be moderated by the way one copes with it (Folkman & Lazarus, 1980).

Coping with Stress and the CIN

As noted in Chapter 1 (see p. 8) there is a theoretical distinction in the literature regarding the construct of coping. Specifically, some researchers view coping as a relatively stable construct where individuals adopt the same coping style across different contexts (e.g., Carver et al., 1989; Endler & Parker, 1990a). In contrast, others consider that coping is a more flexible construct in which individuals choose different coping strategies, in response to the demands of the stressful situation (Folkman & Lazarus, 1984).

Both adaptive and maladaptive coping strategies have been identified in the literature as being used by first responders to critical incidents. Research has shown that police officers involved in critical incidents where actual harm, or threats of harm, have been made towards them are at an increased risk of problematic alcohol use (Ballenger et al., 2011; Ménard & Arter, 2013). Much of this research has, however, had predominantly male samples or not controlled for gender. Controlling for any effect of gender on alcohol use, Ménard and Arter (2014) found that whilst men are more likely to increase their

alcohol use, women appear to reduce their alcohol use to cope with critical incidents. Other researchers have found police officers involved in critical incidents use both adaptive (e.g., exercise) and maladaptive coping strategies (e.g., mentally disengaging from the stressful event) (Leonard & Alison, 1999). A qualitative study by Avraham, Goldblatt, and Yafe (2014), exploring the coping strategies used by paramedics to cope with critical incidents, found emotion regulation was essential for them to continue to function and cope with those events. The findings of this study are, however, limited as the sample included just 3.2% of all paramedics available.

Until recently, the critical incident literature specific to the wellbeing of CINs, has used the term ‘stress management’ rather than ‘coping’. The process of critical incident debriefing has dominated this literature (Bohl, 1992; McMains & Mullins, 2015; Strentz, 2012). The benefits of peer (Greenstone, 2005) and social support (Norton & Petz, 2012) have also been discussed.

Critical incident debriefing (CID). The literature uses the terms ‘Critical Incident Debriefing’ (CID) and ‘Critical Incident Stress Debriefing’ interchangeably; the former will be used for the remainder of this report. Critical incident debriefing is a group process, usually led by a mental health professional, whereby those involved in a critical incident are encouraged to talk about what happened to them, how they felt about it, and to provide education on the usual reactions to trauma (Bohl, 1997; McMains, 1986; Mitchell & Bray, 1990). The aim is to prevent post-traumatic stress disorder (PTSD) symptoms from occurring and to return the person to their level of functioning before the incident occurred (Bohl, 1997).

No empirical studies were found that evaluated the effects of CID on the psychological wellbeing of CINs; however, a study by Bohl (1997) comparing a group of

police officers who had received CID within 24 hours of attending a critical incident, with a group who had not, found the treated group were significantly less depressed, angry, and reported significantly fewer stress-related symptoms on valid and reliable measures of these constructs. The non-randomised selection of participants to the two groups could raise questions about the validity of the results, though no differences in age, marital status, or the number of years in the job were found. In a review of the effects of CID for emergency responders, Regehr (2001) found empirical support for the benefits of the social support and psychoeducational aspects of the group; however, concerns were expressed that reviewing explicit details of the event could increase intrusive thoughts through vicarious traumatisation. The difficulty in making conclusions from such studies is that no critical incident is the same and individual differences such as personality traits, coping styles, and environmental factors are difficult to control for.

Peer and social support. Greenstone (2005) advocates the use of peer support programmes, operating under the supervision of the police department's psychology service, for providing emotional support to CINs. Whilst no empirical studies were found evaluating the outcomes of peer support, specifically for CINs, the empirical literature has examined the impact of social support (i.e., work peers, supervisor, family members, spouse, and friends) for emergency services personnel as a moderator for stress following critical incidents. The findings for the benefits of social support are mixed.

In a quantitative study of 122 correctional officers exposed to critical incidents, Rosine (1992) found social support did not have a significant effect on reducing the negative impact of the event. Similarly, Bakker, Gaillard, van Veldhoven, and Hertogs (2016) found no moderating effect of social support on the impact of critical incidents on police and emergency drivers. In contrast, a meta-analysis of 37 studies reported social

support was a resilience factor in the aftermath of traumatic events with samples of police officers, fire fighters, paramedics, and emergency medical personnel (Prati & Pietrantonio, 2010). Evaluating the effects of social support is, however, impeded by samples having mixed sources of support, or the specific sources of support not being clear.

The Current Review

Given the acceptance that the CIN role is stressful, and the potentially damaging effects of high levels of stress for the negotiation strategy and the wellbeing of the negotiator, understanding the experience of stress and how CINs cope with it is a priority. Understanding the support mechanisms they need, to complement coping strategies, is equally important to gain a holistic picture of stress and the coping responses.

The aim of this systematic review is to identify the coping style(s) and the experience of incident-related stress, coping, and support mechanisms of CINs. The specific objectives for the review are:

1. To identify the coping style(s) of CINs.
2. To identify the sources of incident-related stress for CINs and explore how they experience stress.
3. To explore the coping strategies adopted by CINs to cope with incident-related stress.
4. To identify the support mechanisms available to CINs and explore the views of CINs in relation to them.

Method

To minimise risk of bias from the outset, an a priori ‘road map’ was developed to guide the process of the current review. This was based on items in the Introduction and Methods sections of the PRISMA-P checklist (Moher et al., 2015) and included: having clear questions for the review; a search strategy; identified information sources; a system for managing references; study inclusion/exclusion criteria; and methods for the assessment of quality and data extraction.

Scoping Exercise

An initial scoping exercise was conducted on the 14th October 2016 to get an indication of the amount and type of existing literature for the proposed review. The bibliographic databases PsycINFO, National Criminal Justice Reference Service, Web of Science, and the internet search engines Google and Google Scholar were searched using relevant keywords and phrases as free text, including: ‘hostage negotiator’, ‘critical incident negotiator’, ‘crisis negotiator’ and ‘stress’, ‘coping’, or ‘support’. Searches of the Cochrane Database of Systematic Reviews (CDSR), The Campbell Collaboration, and the Centre for Reviews and Dissemination (DARE) did not identify any existing systematic reviews of relevance to the intended review.

As the scoping exercise identified just three peer-reviewed empirical studies (Grubb, Brown, & Hall, 2015; Spence & Millott, 2016; Young, 2016) the decision was taken to include a search of the grey literature, and un-reviewed studies, for the main search. Whilst the scoping search identified a small number of empirical studies, a systematic review of the literature was deemed appropriate to examine what is currently known in the field to inform the direction of future research (Petticrew & Roberts, 2006).

Search Strategy and Data Sources

The main search strategy was developed bearing in mind the small number of studies retrieved during the scoping exercise. The decision was taken to increase the sensitivity of the database searches for comprehensiveness and, by doing so, accept this would reduce its specificity. This strategy would likely retrieve a higher number of irrelevant references, but it was considered a necessary compromise.

There were four stages to the search strategy:

1. Conventional electronic database searching
2. Reviewing the reference lists of all full-text references retrieved
3. Contact with experts
4. Citation searching of the references included in the current review

Time was spent identifying relevant search terms using citation pearl growing techniques to identify as many relevant search terms as possible (Papaioannou, Sutton, Carroll, Booth, & Wong, 2010). The first stage in this process was to identify the key concepts of the review's objectives (hostage, critical incident, or crisis negotiator; stress; coping; and support). Synonyms for these terms were then generated by the researcher. Additional search terms were identified from the suggested index/subject terms, and keywords, in the three articles retrieved during the scoping exercise. All search terms were then run through the PsycINFO database individually as free text, mapping them to subject headings (e.g., subject headings of 'stress' and 'coping behavior'). The subject headings were also 'exploded' meaning narrower subject headings under the main heading were also included; for example, narrower subject headings under the subject heading of 'stress' included 'psychological stress' and 'stress reactions'. The purpose of this was to identify

any additional words or phrases of relevance to the search. Whilst this process did not elicit any further words, it identified the utility of exploding the subject headings 'stress', 'coping behavior', and 'social support', due to each having relevant narrower terms/phrases to the search. No relevant subject heading for 'hostage', 'critical', or 'crisis' negotiator was available. The final search terms can be found in Figure 1.

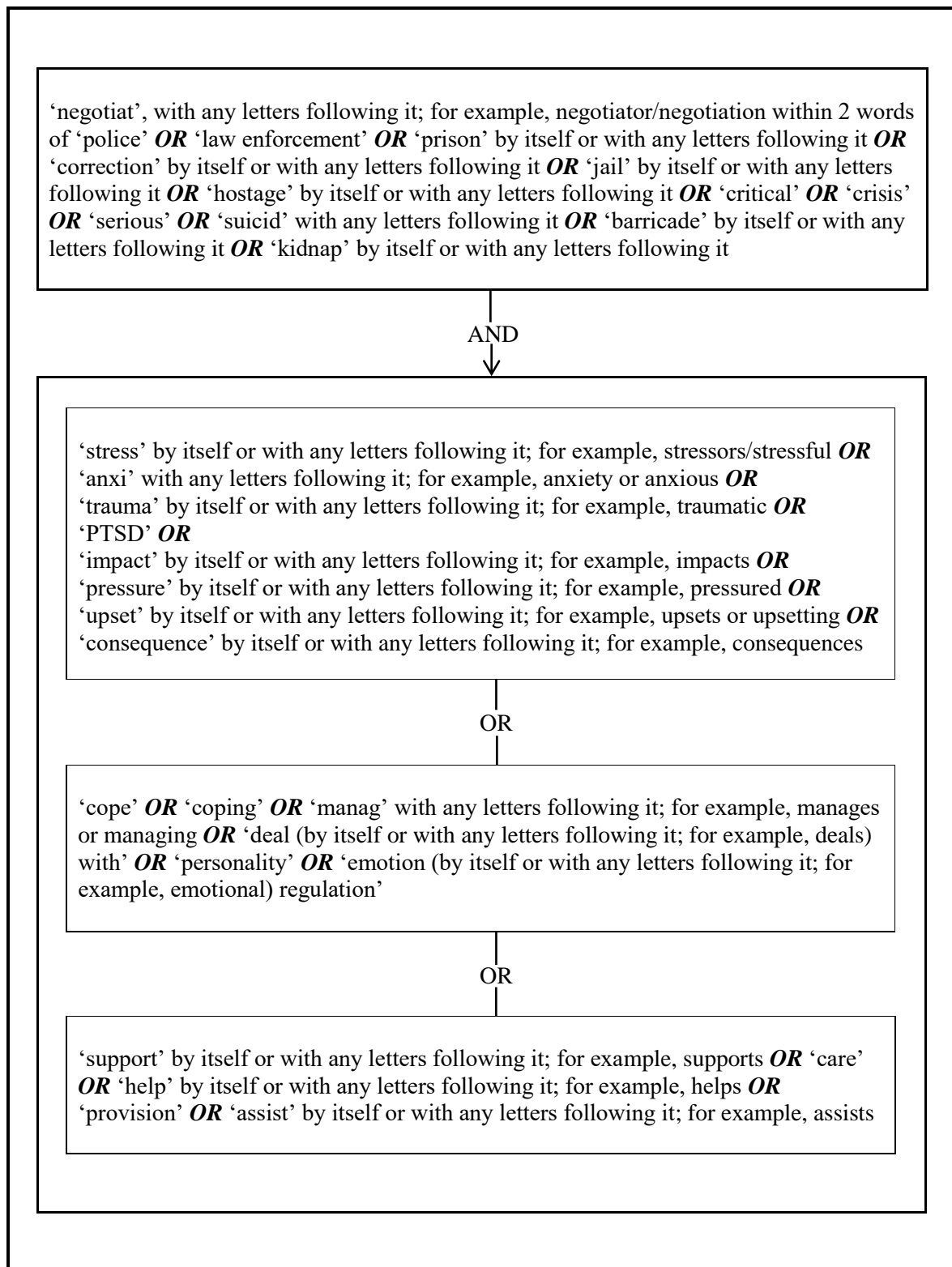


Figure 1. Search terms used for the database searches

Databases were chosen from researching the content of potentially relevant psychology, sociology, and criminal justice databases, accessed through the University of Birmingham Library Services website. Advice was also sought from the University of Birmingham specialist librarian for psychology. Nine electronic databases were searched in total, including: PsycINFO (1967 - Present); Web of Science (1900 - present); National Criminal Justice Reference Service (NCJRS) Abstracts (1975 - present); Criminal Justice Database (1981 - present); Applied Social Sciences Index and Abstracts (ASSIA) (1987 - present); Social Science Database (1911 - present); Sociological Abstracts (1952 - present); Social Services Abstracts (1979 - present); ProQuest Dissertation and Theses Global (1861 - present). All databases were searched on 30th July 2017. The exact search syntax and results for each database search can be found in Appendix A. References were managed using the RefWorks management software and alerts applied so that each search was run monthly, and the results e-mailed to the researcher's university e-mail address.

The second stage of the search strategy involved manually searching the reference lists of all the full-text references ($n = 30$) meeting the inclusion criteria. Third, contact was made via e-mail with six experts whom had conducted research directly relevant to the review questions or had published in the wider field of CINn (Lawrence Alison, Nancy Bohl-Penrod, Amy Grubb, Carol Ireland, William Spence, and Andrew Young) to request they direct me to any studies I may have missed and to enquire if they were aware of any new studies expected to be published prior to January 2018. A list of the references already retrieved and the inclusion/exclusion criteria for the systematic review were attached to the e-mail. Three experts responded, one of whom also forwarded my request to two of her PhD students currently conducting research in the field of CINn.

The fourth stage of the search strategy was to search for references that had cited any of the seven studies meeting the inclusion criteria. This was completed using the ‘Citation Network’ function in the Web of Science database and ‘cited by’ function in Google Scholar.

Selection and Screening of References

Development of the selection and screening tool (SST). Following a review of the various selection tools available, the SPIDER (Sample, Phenomenon of Interest, Design, Evaluation, Research type; Cooke, Smith, & Booth, 2012) was considered the most appropriate due to it being flexible to the characteristics of both qualitative and quantitative studies.

Limits were applied to the searches in relation to language, date range, and restrictions on the publication type to be retrieved. Only English language papers were retrieved owing to the lack of time and resources available to enable the translation of non-English language papers. Whilst the earliest peer-reviewed empirical paper identified from the scoping search was published in 2015, the start date for the search was chosen as 1977 due to a doctoral thesis completed in 1979 focusing on the personality traits of CINs (Gelbart, 1979). Whilst the focus did not fall in-scope for the current review, it indicated that research in the field was occurring and some studies may be available. Published and unpublished peer- and un-reviewed empirical studies, and doctoral level theses, were included in the review. Non-empirical papers and below doctoral level theses were excluded from the review on the grounds they would not meaningfully contribute to the evidence base. The SST applied the inclusion/exclusion criteria as detailed in Table 1.

Table 1

Inclusion/Exclusion Criteria

	Inclusion criteria	Exclusion criteria
Sample	Hostage, critical, or crisis negotiator	Any other type of negotiator
Phenomenon of Interest	General coping style; incident-related stress; incident-related coping strategies; incident-related support mechanisms	Stress, coping strategies, and support unrelated to negotiation incidents. Negotiator tactics, strategies, or training
Design	Questionnaire; survey; interviews; focus groups; psychometric test; questionnaire to assess coping, stress, or support mechanisms	No empirical data collection method used
Evaluation	Themes; views; experiences; attitudes; opinions <i>OR</i> Outcome measure from psychometric test or questionnaire	No empirical data analysis method used
Research Type	Qualitative, quantitative, mixed-methods	Non-empirical papers

Selection and screening process. Eight hundred and twenty-eight references were retrieved from the database searches. Duplicate references were removed using RefWorks software, followed by hand searching (Kwon, Lemieux, McTavish, & Wathen, 2015); 607

references remained following de-duplication ($n = 221$). The titles and abstracts of the 607 references were reviewed by the researcher and obviously irrelevant references, based on the title and/or abstract, were excluded ($n = 581$). Where relevance to the review was unclear, the reference was included to the next stage. From the 26 references remaining, 25 full-texts were retrieved from the University of Birmingham library and from inter-library loans. One full-text reference was retrieved from direct contact with the publication (Police Chief; Mirabella & Trudeau, 1981). In addition to the results from the database searches, a doctoral thesis was obtained from direct contact with an expert (Dr Amy Grubb). Three references were subsequently identified as potentially relevant from checking the reference lists of the 27 full-text references. One reference was received from a PhD student; however, this had already been excluded.

Two researchers independently screened the 30 full-text references using the SST (see Appendix B). A discussion was held over one reference (Mirabella & Trudeau, 1981) which both researchers had identified as requiring further discussion. Following discussion, both researchers agreed that the reference should be excluded as it did not meet the evaluation criteria. Following screening, seven references remained. No additional references were located from citation searching.

A schematic diagram of the selection and screening process is presented in Figure 2. The references excluded using the SST can be found in Appendix C along with their reason for exclusion.

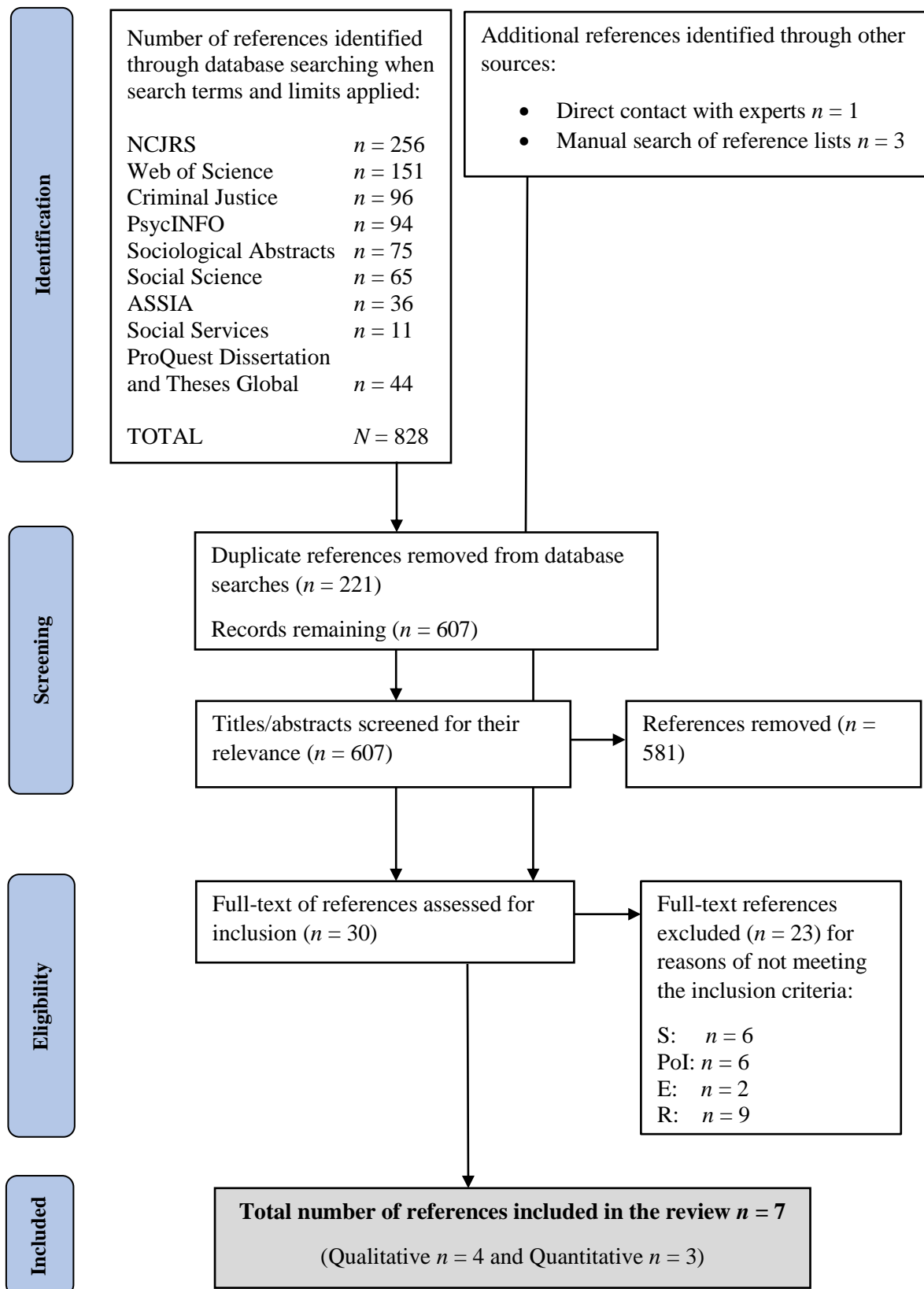


Figure 2. Flow diagram of the selection and screening process

Quality Assessment of Included Studies

An assessment of the risk of bias potentially introduced into each study was conducted to examine how trustworthy each one could be in answering the review questions (Petticrew & Roberts, 2006). The methodological differences between the studies necessitated the use of two quality assessment tools to assess methodological rigour.

The Critical Appraisal Skills Programme checklist for qualitative research (CASP, 2017) was used to assess the quality of the four qualitative studies in this review (see Appendix D). The CASP was chosen as it is an established tool having been developed and tested by a multi-disciplinary working group and can also be modified to meet the needs of individual reviews (e.g., Campbell et al., 2003; Malpass et al., 2009). Having read the qualitative studies to be included in this review, three questions were added to the original tool. The questions added are existing questions within the original CASP tool as ‘points to consider’ when assessing a particular criterion. Two questions were added in relation to data analysis (‘Are there sufficient data to support the themes?’ and ‘Did the researcher critically examine their own role, potential bias and influence, during the analysis and selection of the data for presentation?’) and one question was added in relation to the reporting of the findings (‘Are the findings discussed in relation to the original research questions?’). This increased the number of detailed questions to 11. A further modification was made to the rating scale by adding the option of ‘Partial’ to the existing, ‘Yes’, ‘No’ and ‘Can’t Tell’ options. This allowed the assessor an alternative rating when some factors within a criterion were met and others not. A scoring system was used where 2 = Yes (criterion met), 1 = Partial (criterion partially met), 0 = (criterion not met) and CT = Can’t Tell (unable to rate). ‘Can’t Tell’ was reserved for occasions where a lack of information

prevented the assessor from making a sound judgement; it was not to be used in cases where the assessor simply had difficulty deciding. The potential for bias included consideration of: sampling methods; data collection; evidence of reflection by the researcher of their role/influence in the data collection, analysis, and reporting; rigour of data analysis; and the reporting of findings. The maximum score was 22.

The AXIS (Downes, Brennan, Williams, & Dean, 2016) tool was used to assess bias in the cross-sectional studies (see Appendix E). The AXIS was chosen as it has been specifically designed for cross-sectional studies and was developed using a Delphi panel of 18 experts. A strength of the tool is that it assesses bias in the reporting of the findings, in addition to the design of the study, and data analysis. Following a review of the tool, against the studies to be assessed, no adaptations were considered necessary. A quality score was assigned to the study by adding the total number of ‘Yes’ ratings (a maximum score of 20). The scores for all seven studies were turned into percentages to allow comparisons of quality to be made across the qualitative and quantitative studies more easily. It is important to note, however, that making direct comparisons across the qualitative and quantitative studies may not be possible given different quality assessment tools were used.

Prior to assessing the quality of the studies, it was decided that no study would be excluded on the grounds of quality, due to the small number of studies retrieved, and the view that all studies may have something to contribute to the review (Britten, Campbell, Pope, Donovan, Morgan, & Pill, 2002; Dixon-Woods et al., 2007). Quality assessment was therefore used to inform the weights that could be assigned to each source of evidence rather than to exclude studies (Pope, Mays, & Popay, 2007).

The researcher assessed the quality of all seven studies. To increase the quality of the review, a second psychologist independently reviewed one quantitative and one qualitative study (29% of the whole sample). Doctoral theses were purposefully not selected due to the extra time these would take to read and assess. There was 100% agreement in ratings for the quantitative study and 75% agreement for the qualitative study. The differences in scores for the qualitative study were addressed through discussion until consensus was reached. Neither assessor considered it necessary to involve a third party to assist in the resolution of differences of opinion.

In line with best practice (Fleeman & Dunder, 2014), one author was contacted to seek clarification on a matter (Grubb, Brown, & Hall, 2015) and a second author was contacted to gather further information with respect to the data analysis section of the paper (Young, 2016). Both authors responded with the requested information and this was taken into consideration during the quality assessment process.

Data Extraction

Data were extracted according to the review questions (Pope et al., 2007). Two studies included in the review (Grubb et al., 2015; Young, 2016) investigated coping styles and personality traits of CINs, using comparator groups of police officers untrained in negotiation techniques. Grubb et al. also used a student sample comparator group. As assessing personality traits and making comparisons of individual characteristics between different groups were both outside the scope of this review, these data were not extracted. However, data investigating differences between the means of the CIN sample and psychometric norms for the Cognitive Emotion Regulation Questionnaire (CERQ; Garnefski, Kraaij, & Spinhoven, 2002) were extracted to provide further understanding of

CIN coping skills, as both Grubb et al. and Young had reported these results. Data investigating differences between the means of the CIN sample and psychometric norms for the Coping Skills Test-Revised (CST-R; Jerabek, 2001) used by Grubb et al. were also extracted for parity in comparison group.

Some data required clarification prior to data extraction. Grubb et al. (2015) created two larger sub-scales (*Adaptive Cognitive Emotion Regulation Strategies* and *Maladaptive Cognitive Emotion Regulation Strategies*) from the sub-scales of the CERQ. The lead author has confirmed there is a typographical error within the paper and that the *Rumination* sub-scale was combined into the new Maladaptive scale and the *Refocus on Planning* sub-scale was combined into the new Adaptive scale. The results of the study are in no way affected (A. Grubb, personal communication, October 13th, 2017). Young (2016) confirmed that the statistical test used for the data presented in Table III was a one-way ANOVA and that all sub-scales were significant at the $p < .05$ level (A. Young, personal communication, January 5th, 2018).

Data within the qualitative studies were extracted as interpreted and presented by the primary authors and no further, ‘third-order’, interpretations were made by the author of this review (Thomas & Harden, 2008). All data relevant to answering the review questions were subsequently extracted, irrespective of the theme label it had been assigned by the primary author(s). Data using the words, ‘anxiety’, ‘anxious’, ‘nervous’, and ‘fear’, were extracted as relevant for answering the review question concerned with negotiator stress. The rationale for this being that the words ‘anxiety’, ‘anxious’, and ‘nervous’, are synonyms for stress, and ‘fear’ is an emotion that can be triggered by stress (Folkman & Lazarus, 1986). Data were identified as relevant where these words were used in a direct

quote from a participant, or where the primary researcher had used one of these words to interpret a participant's quote.

A form was developed for the specific purpose of extracting and recording data for this review (see Appendix F) and included:

- General information (title, author(s), year of publication, and country of the study)
- Study characteristics (design/type of study, study aims, measure(s)/data collection method, standardisation/validity/reliability of measures)
- Participant characteristics (primary occupation, sample size, gender, age, ethnicity, years as a negotiator, number of incidents attended, method of recruitment, response rate)
- Study results (analysis method used, findings and significance, themes and key concepts)
- Conclusions

Data Synthesis and Analysis

There was much heterogeneity amongst the studies included in this review with respect to: different epistemological stances; different assessment measures used in the quantitative studies; and different research questions, and data analysis methods, across the qualitative studies. Such heterogeneity precluded the techniques of meta-analysis and meta-synthesis for synthesising the data (Higgins & Green, 2011). Not bound by any epistemological or ontological perspective, a narrative synthesis was considered the most appropriate means of synthesising the data (Booth et al., 2016; Popay et al., 2006; Ring, Jepson, & Ritchie, 2011). The term 'narrative synthesis' can have different meanings

(Pluye & Nha Hong, 2014) and so, for clarity, narrative synthesis for this review refers to the synthesising of qualitative and quantitative data using text and descriptions to summarise and explain the findings (Popay et al., 2006).

Tools and techniques outlined by Popay et al. (2006) for conducting a narrative synthesis, were used for synthesising the data. First, a preliminary synthesis was conducted by tabulating the characteristics and main findings for each study (see Table 2). Second, an exploration of the relationships in the data was conducted through constant comparison of the data and findings in each study. Identifying similarities as well as contradictions in the data was a key step in this process (Pawson, Greenhalgh, Harvey, & Walshe, 2005). Third, a visual representation of the key concepts to the review questions was developed via concept mapping (Mulrow, Langhorne, & Grimshaw, 1997) (see Appendix G). Finally, a critical reflection on the systematic review process was conducted as part of the limitations of the review.

Results

The studies in this review include an investigation of the coping styles of CINs, and an exploration of their experience of negotiation-related stress, coping, and support mechanisms. The outcome of the quality assessment stage can be found in Appendix H for the qualitative studies and Appendix I for the quantitative studies. Table 2 presents a preliminary synthesis of the data, showing the characteristics of the included studies, the participants, and a summary of the main findings.

Study Characteristics

All seven studies meeting the inclusion criteria were included in this review. Four studies adopted a qualitative design using semi-structured interviews as the method of data collection (Grubb, 2016; Sachs, 1996; Spence & Millott, 2016; Terhune-Bickler, 2005). Each of these studies explored two or more of the phenomenon of interest areas of incident-related stress, incident-related coping strategies, and/or the support mechanisms available to CINs (see Table 3, p. 51).

Three studies adopted a quantitative cross-sectional design; two of these studies used valid and reliable psychometric measures to assess coping styles (Grubb et al., 2015; Young, 2016) and one study utilised a researcher developed questionnaire to explore incident-related stress, incident-related coping strategies, and the support mechanisms available to CINs (see Appendix J for further details of the questionnaire; Bohl, 2001).

The location of the studies was restricted to the US (Bohl, 2001; Sachs, 1996; Terhune-Bickler, 2005; Young, 2016) and UK (Grubb, 2016; Grubb et al., 2015; Spence & Millott, 2016). The earliest studies are doctoral theses (i.e., Sachs, 1996; Terhune-Bickler, 2005) and a published study not peer-reviewed (Bohl, 2001). The first peer-reviewed study was published in 2015 (Grubb et al., 2015) indicating this literature is just developing.

Table 2

Characteristics of the Included Studies

General information	Study characteristics		Participant characteristics (in relation to the review questions)		Study results (in relation to the review questions)	
Author, year, country, & quality assessment score	Aims and design of the study	Measure(s) relevant to review questions; standardisation, reliability & validity/data collection	Participant characteristics	Method of recruitment and response rate where reported	Analysis method(s) used	Findings
1. Bohl (2001) USA 50%	1. To obtain a measure of distress experienced by negotiators who have experienced a subject commit suicide. 2. To obtain feedback on the use and helpfulness of sources of support. 3. To identify coping mechanisms used by negotiators. Quantitative – cross-sectional	Researcher designed questionnaire to assess: details about the suicide incident; formal and informal support after the incident; long-term effects of the incident (PTSD and work-related problems); the individual's own coping mechanisms; resolution of feelings.	55 police officers trained and active as hostage (crisis) negotiators who had been involved in negotiations where the suspect had committed suicide. 74.5% male ($n = 41$). Mean age of 41.6 years ($SD = 6.92$) Years as a negotiator ranged from less than 1 year to 23 years ($M = 8.1$; $SD = 5.27$). Number of incidents attended ranged from 1 to 13 ($M = 2.5$; $SD = 2.68$)	500 questionnaires mailed to randomly selected members of the California Association of Hostage Negotiators (CAHN). 55 (11%) useable questionnaires returned.	mean, SD, median, t -test and chi-square test	<u>Incident-related stress</u> <i>The experience of stress:</i> <i>Anxiety</i> - 64% ($n = 35$) of the sample recalled symptoms of anxiety during the event, including: time slowed down (63%); sounds intensified (54%); tunnel vision (48%); heightened visual detail (34%); sounds diminished (26%); time sped up (23%). <i>PTSD</i> - The number, severity, and duration of PTSD symptoms (from a list of 25 possible symptoms) was skewed across the sample and so median scores were reported rather than means. Total number of PTSD symptoms experienced by participants covered the full range of possibilities but most clustered towards the high end ($Mdn = 24$). Severity of PTSD symptoms (scale of 1 to 10) ranged from 1 to 7.8 ($Mdn = 1.2$) and duration from one month or less to over one year (scale of 1 to 5) ($Mdn = 1$). Most frequently reported symptoms: a sense of loss of control over things (85%); depression (no information on whether this was diagnosed or self-report) (78%);

General information	Study characteristics		Participant characteristics (in relation to the review questions)		Study results (in relation to the review questions)	
Author, year, country, & quality assessment score	Aims and design of the study	Measure(s) relevant to review questions; standardisation, reliability & validity/data collection	Participant characteristics	Method of recruitment and response rate where reported	Analysis method(s) used	Findings
						<p>flashbacks (76%); heightened sense of danger (75%); vulnerability (75%); irritability (75%).</p> <p><i>Impact of stress</i> - The total number of work-related problems (from a list of 11), the severity (scale of 1 to 10) and duration (scale of 1 to 5) of those problems covered the full range of possibilities listed. Scores clustered towards the high end for number (<i>Mdn</i> = 11) and low end for severity (<i>Mdn</i> = 1) and duration (<i>Mdn</i> = 1). The most frequently rated problems were: distrust of the department (71%); lowered self-confidence (67%); distrust of peers (64%); and fears for the future (64%).</p> <p>There were no significant correlations between the number of prior incidents attended and the number, severity, or duration of PTSD symptoms or work-related problems.</p> <p><u>Incident-related coping strategies</u> 82% of those accessing formal support used critical incident debriefing as a coping mechanism.</p> <p>The most frequently reported coping mechanisms by all participants were all positive: support from co-workers (53%); support from family (42%); use of prior training in stress management (40%).</p>

General information	Study characteristics		Participant characteristics (in relation to the review questions)		Study results (in relation to the review questions)	
Author, year, country, & quality assessment score	Aims and design of the study	Measure(s) relevant to review questions; standardisation, reliability & validity/data collection	Participant characteristics	Method of recruitment and response rate where reported	Analysis method(s) used	Findings
						<p>Negative coping mechanisms were used infrequently: not thinking about feelings (20%); increased alcohol consumption (9%); increased smoking (7%).</p> <p><u>Incident-related support mechanisms</u> <i>Formal support mechanisms:</i> 51% of the sample were debriefed by a mental health professional after the incident. 90% had rated it ‘very helpful’ or ‘somewhat helpful’. 35% of the sample met with a peer support team member and all rated the experience as ‘very helpful’ or ‘somewhat helpful’. One participant talked with a department chaplain and rated the experience as ‘neutral’. 40% of participants did not access any form of formal support.</p> <p><i>Informal support mechanisms:</i> 85% of participants reported that co-workers provided ‘some support’ or a ‘great deal of support’ and 78% reported that supervisors provided ‘some support’ or a ‘great deal of support’.</p>
2. Grubb (2016) ^a England, UK	To generate theory of hostage (crisis) negotiation based on the experiences	Semi-structured interviews	15 police officers trained and active as hostage (crisis) negotiators.	All participants who took part in the first phase of research in the thesis and had	Grounded theory	Two grounded theory models were developed that were relevant to the review aims: Model 1. ‘The hostage and crisis negotiator journey’ and Model 2. ‘The UK hostage and crisis negotiator experience model’

General information	Study characteristics		Participant characteristics (in relation to the review questions)		Study results (in relation to the review questions)	
Author, year, country, & quality assessment score	Aims and design of the study	Measure(s) relevant to review questions; standardisation, reliability & validity/data collection	Participant characteristics	Method of recruitment and response rate where reported	Analysis method(s) used	Findings
95%	of active UK negotiators Qualitative		60% male ($n = 9$). Age ranged from 41 to 54 years ($M = 45.9$). Length of service as a negotiator ranged from 24 to 195 months ($M = 90.7$). Number of incidents attended ranged from 8 to 200.	agreed to be approached for the second (interview) phase were contacted and offered the opportunity to take part in an interview. The researcher chose 15 participants using purposive sampling to identify a wide range of negotiator experiences.		<u>Incident-related stress</u> Model 2. <i>Sources of stress</i> created by operational issues (lack of operational discipline; negotiating solo) and organisational issues (dual role conflict). Themes for the <i>experience of stress</i> : negotiation as non-stressful; negotiator eustress (beneficial stress); and negotiation as a “different type of stress”. <u>Incident-related coping strategies</u> Model 1. Self-directed negotiator coping strategies: peer support from other members of the cadre; social support from family/friends/colleagues; using exercise and/or sport; drinking alcohol. <u>Incident-related support mechanisms</u> Model 1. Force specific formalised support mechanisms include: debriefing procedures; buddying/shadowing system; occupational health/welfare provision; and “stepping off the rota”. Model 2. Informal support mechanism: cadre as supportive.

General information	Study characteristics		Participant characteristics (in relation to the review questions)		Study results (in relation to the review questions)	
Author, year, country, & quality assessment score	Aims and design of the study	Measure(s) relevant to review questions; standardisation, reliability & validity/data collection	Participant characteristics	Method of recruitment and response rate where reported	Analysis method(s) used	Findings
3. Grubb, Brown, & Hall (2015) ^b England, UK 80%	To explore cognitive emotion regulation, coping style and personality traits of police hostage (crisis) negotiators. Quantitative – cross-sectional	Modified version of Cognitive Emotion Regulation Questionnaire (CERQ) to measure cognitive coping style and emotion regulation. <u>Reliability</u> Internal consistency for the research sample reported as ‘good’ overall ($\alpha = .84$) with the nine sub-scales ranging from .71 to .82. Two larger sub-scales created by the researcher for their dataset: <i>Adaptive Cognitive Emotion Regulation Styles</i> ($\alpha = .7$) and <i>Maladaptive Cognitive Emotion Regulation Styles</i> ($\alpha = .7$). Validity not reported.	117 active police hostage negotiators. 77% male ($n = 90$). Age ranged from 29 to 61 years ($M = 43$; $SD = 6.1$). 98% ($n = 115$) were White British. Length of service as a negotiator ranged from 0 to 192 months ($M = 64$; $SD = 45.4$). Number of incidents dealt with as a negotiator ranged from 0 to 300 ($M = 182$; $SD = 52$).	Paper format questionnaires were sent to the Lead Hostage Negotiator Coordinator for each police force to disseminate to negotiators to complete either at one of their quarterly meetings or within their own time.	Descriptive statistics and independent t -tests to compare CINs with psychometric norms.	<u>Coping style</u> Mean difference between CINs and norms shown in brackets. <i>Cognitive Emotion Regulation Questionnaire</i> Compared to norms, CINs significantly more likely ($p < .002$) to use cognitive coping strategies of: <i>Acceptance</i> (+ 1.17); <i>Refocus on Planning</i> (+ 1.34); <i>Positive Reappraisal</i> (+ 3.36); <i>Putting into Perspective</i> (+ 2.6); and <i>Other Blame</i> (+ 1.66). No significant results for strategies CINs may be less likely to use. <i>Coping Skills Test-Revised</i> Compared to norms, CINs significantly more likely ($p < .001$) to cope well with problems (+ 10.38), and significantly more likely to use <u>Problem-focused coping</u> (+ 7.13): <i>Problem-Solving</i> (+ 11.96) and <i>Negotiation</i> (+ 13.66); and <u>Emotion-focused coping</u> (+ 4.75): <i>Positive Cognitive Restructuring</i> (+ 13.21). CINs significantly less likely ($p < .001$) to use <u>Hang-up/Maladaptive coping</u> (- 16.68): <i>Rumination</i> (- 20.62); <i>Avoidance</i> (- 15.9); <i>Helplessness</i> (- 21.44); <i>Social Withdrawal</i> (- 12.79); and <i>Opposition</i> (- 13.48).

General information	Study characteristics		Participant characteristics (in relation to the review questions)		Study results (in relation to the review questions)	
Author, year, country, & quality assessment score	Aims and design of the study	Measure(s) relevant to review questions; standardisation, reliability & validity/data collection	Participant characteristics	Method of recruitment and response rate where reported	Analysis method(s) used	Findings
		<p><u>Standardisation</u> Norm group used for comparisons based on 18 – 65-year-old sample from the Netherlands ($N = 611$; $n = 242$ male; $n = 369$ female).</p> <p>Coping Skills Test-Revised (CST-R) to measure cognitive and behavioural coping style.</p> <p><u>Reliability</u> – ‘high’ internal consistency reported for the overall coping scale ($\alpha = .94$) and the three sub-scales ranging from .88 to .93. Two larger sub-scales created by the researcher for their dataset: <i>Adaptive Coping Skills</i> ($\alpha = .8$) and <i>Maladaptive Coping Skills</i> ($\alpha = .88$).</p> <p>Validity not reported.</p>				

General information	Study characteristics		Participant characteristics (in relation to the review questions)		Study results (in relation to the review questions)	
Author, year, country, & quality assessment score	Aims and design of the study	Measure(s) relevant to review questions; standardisation, reliability & validity/data collection	Participant characteristics	Method of recruitment and response rate where reported	Analysis method(s) used	Findings
		<u>Standardisation</u> Sample size $N = 8998$				
4. Sachs (1996) Michigan, USA 73%	To explore how negotiators experience and manage the conflicting demands of the role in their relationships with suspects. Qualitative	Semi-structured interviews including role-play exercises.	13 police officers trained and active as police negotiators. 85% male ($n = 11$). Age ranged from 34 to 48 years ($M = 40.5$). 85% described as "Caucasian" ($n = 11$). Years as a negotiator ranged from 4 months to 12 years ($M = 5.6$ years).	Introduced to "approximately" 55 trained police negotiators through 'gatekeepers' (former police officer/graduate student; 2 police psychologists and one police instructor). Individually identified potential participants were telephoned directly and groups of negotiators were addressed at training events. 19 (34.5%) negotiators volunteered to participate. Theoretical	Grounded theory	<u>Incident-related stress</u> Stressors from interpersonal, internal, and external sources: <i>Interpersonal sources of stress:</i> Letting the tactical team down by exposing them to risk; feeling unappreciated by the tactical team; frustration directed at the suspect for failure to keep his word, or his silence, meaning the negotiator is unable to 'read' them; anxiety that the negotiator's family will be worried about them. <i>Internal sources of stress:</i> Performance anxiety/fearing bad performance in front of colleagues; feeling to blame in the event of suicide; self-criticalness or humiliation over poor performance or lack of control; boredom; and fatigue. <i>External sources of stress:</i> Interference by non-negotiator colleagues; stress or fear from a known threat (e.g., hostages; injury to hostages or police officers; "hardcore" criminal suspects); intense public scrutiny especially when the media are present.

General information	Study characteristics		Participant characteristics (in relation to the review questions)		Study results (in relation to the review questions)	
	Aims and design of the study	Measure(s) relevant to review questions; standardisation, reliability & validity/data collection	Participant characteristics	Method of recruitment and response rate where reported	Analysis method(s) used	Findings
				sampling and purposeful selection of a diverse sample based on a priori criteria.		<u>Incident-related coping strategies</u> Coping strategies summarised as: training in suppression of affect; training in normalisation of affect; personal use of training; de-briefing – venting; de-briefing – self-observation/reflection; externalising responsibility; humour; reliance on team members for emotional and work support.
5. Spence & Millott (2016) Scotland, UK 41%	To explore the attitudes, coping mechanisms, and support needs of police negotiators in relation to their role in suicide prevention. Qualitative	A flexible interview guide developed by the researcher.	16 police officers trained and active as negotiators involved in suicide negotiation. Years of experience as a negotiator ranged from 6 months to 11 years.	Invitations e-mailed to all trained and current negotiators ($n = 29$) in one police service in Scotland. 55% response rate.	Grounded theory	<u>Incident-related stress</u> Theme: <i>'Perceptions of the negotiator role in suicide prevention'</i> - Anxiety and nervousness to “get it right” and a fear of failure related to personal and professional consequences (under-performing in front of colleagues, how would they cope if the person committed suicide, and an enquiry into their performance). - Feelings of excitement and anticipation identified. - Small number of negotiators reported the role was no more stressful than their ordinary police role. <u>Incident-related coping strategies</u> Theme: <i>'Coping mechanisms of negotiators'</i> - Humour a key coping mechanism described by most participants. - Family were described by several participants to be source of coping support for

General information	Study characteristics		Participant characteristics (in relation to the review questions)		Study results (in relation to the review questions)	
Author, year, country, & quality assessment score	Aims and design of the study	Measure(s) relevant to review questions; standardisation, reliability & validity/data collection	Participant characteristics	Method of recruitment and response rate where reported	Analysis method(s) used	Findings
						<p>both the practical consequences of the role and the psychological fall-out.</p> <ul style="list-style-type: none"> - A small number prefer not to talk about the role with their spouse. - Most participants said interaction with their negotiator colleagues, and colleagues in general, were key coping strategies. <p><u>Incident-related support mechanisms</u> Theme: <i>'Support for the role'</i> Sub-theme: <i>Psychological/emotional support.</i></p> <ul style="list-style-type: none"> - Some participants felt well-being was considered as part of post-incident debriefing, others felt these were more incident focused. - Most know of their employer's occupational health service employee support programme but were not aware of the type of support available or how to access it. All participants said they would use the service if they needed it. - Views on the associated stigma of help-seeking were mixed. Some expressed a referral should be mandatory on occasion. - Several participants said there was a lack of formal support mechanisms. <p>Sub-theme: <i>Practical support and resources.</i></p> <ul style="list-style-type: none"> - Resources considered to be poor and inadequate compared to other specialist units (lack of appropriate clothing, mobile phones and blue lights for civilian cars).

General information	Study characteristics		Participant characteristics (in relation to the review questions)		Study results (in relation to the review questions)	
Author, year, country, & quality assessment score	Aims and design of the study	Measure(s) relevant to review questions; standardisation, reliability & validity/data collection	Participant characteristics	Method of recruitment and response rate where reported	Analysis method(s) used	Findings
<p>6. Terhune-Bickler (2005)</p> <p>Southern California, USA</p> <p>59%</p>	<p>To explore crisis negotiators' responses to incidents that resulted in suicide.</p> <p>Qualitative</p>	<p>Semi-structured interviews</p>	<p>26 police officer crisis negotiators whom had negotiated with a suicidal person who had committed suicide at the scene of the negotiation.</p> <p>96% male ($n = 25$).</p> <p>73% ($n = 19$) were "Anglo" or "White".</p> <p>Age ranged from 37 to 60 years ($M = 42$).</p> <p>Years as a negotiator ranged from 1 to 23 years ($M = 9$).</p>	<p>A cover letter explaining the research and a questionnaire to assess eligibility for the study were distributed as follows:</p> <ol style="list-style-type: none"> 1. By the researcher to negotiators at a meeting of the CAHN. 2. via Crisis Negotiation Team supervisors in "several" police agencies identified by the researcher. 3. E-mailed by a Board member of CAHN to their negotiator membership list. <p>Prospective participants were asked to contact the researcher directly.</p>	<p>Narrative inquiry adopting a "categorical-content" perspective in which the original story was dissected to identify the main themes.</p>	<p><u>Incident-related stress</u></p> <p><i>Trauma</i> – One participant was diagnosed with PTSD, with symptoms lasting six months.</p> <p>For most participants, memories of the suicide incident resurface at future call-outs, regardless of the type of incident.</p> <p><i>Emotional impact</i> - No participants reported it to be so traumatic they wished to leave the crisis negotiation team.</p> <p><u>Incident-related coping strategies</u></p> <p><i>"Gallows humour"</i> - Only one participant used this.</p> <p><i>Cognitive appraisal of the situation ("Lack of control")</i> – Approximately half the participants considered the outcome had not been in their control; administrators, supervisors and SWAT team were responsible for strategy and decision-making and/or that the suicidal subject had a plan that they would not deviate from.</p> <p><i>Debriefing</i> – Most negotiators discussed the incident with spouse, close friends, and colleagues.</p> <p><u>Incident-related support mechanisms</u></p> <p><i>Mental health services (MHS)</i> – The majority ($n = 21$) did not attend MHS as they did not think it would be helpful; the author attributes this to stigma associated with help seeking.</p>

General information	Study characteristics		Participant characteristics (in relation to the review questions)		Study results (in relation to the review questions)	
Author, year, country, & quality assessment score	Aims and design of the study	Measure(s) relevant to review questions; standardisation, reliability & validity/data collection	Participant characteristics	Method of recruitment and response rate where reported	Analysis method(s) used	Findings
						<p><i>Critical incident debriefing (CID)</i> – 12 CID’s were offered from a total of 31 incidents. Just over half the participants ($n = 15$) chose to attend at least one debrief; 13 said it was helpful, one thought it was too soon after the event and one did not find it helpful.</p> <p><i>Spouse</i> – All participants confided in their spouse.</p> <p><i>Non-family members</i> – 12 confided in a close friend or co-worker. Negotiation team support each other.</p> <p><i>Positive feedback</i> – This was deemed essential to prevent against sense of personal failure.</p> <p><i>Lack of support</i> – Some participants reported receiving no support. One stated they had “no closure” as a result.</p>
7. Young (2016) ^c USA 65%	To measure the personality, cognitive emotion regulation, and decision-making style of police hostage (crisis) negotiators. Also hoped to identify the experiences and/or personal characteristics of	<p>Cognitive Emotion Regulation Questionnaire (CERQ)</p> <p><u>Reliability</u> – internal consistency for the nine sub-scales for adult males reported between $\alpha = .75$ and $\alpha = .86$.</p>	<p>514 law enforcement negotiators returned a battery of questionnaires. Some data were missing accounting for the different sample sizes in demographic characteristics.</p> <p>506 returned useable CERQ</p>	Introductory letter e-mailed through the websites of law enforcement agencies and associations of police hostage negotiators ($N = 440$); assessment instruments were subsequently e-mailed to a contact person for	One-way ANOVA ^d to compare CINs with psychometric norms.	<p><u>Coping style</u></p> <p><i>Cognitive Emotion Regulation Questionnaire</i></p> <p>Mean difference between CIN’s and norms is shown in brackets.</p> <p>Compared to norms, CINs significantly more able ($p < .05$) to use cognitive coping strategies of: <i>Acceptance</i> (+ .47); <i>Positive Refocusing</i> (+ .6); <i>Refocus on Planning</i> (+1.23); <i>Positive Reappraisal</i> (+ 3.21); <i>Putting into Perspective</i> (+ 1.06); <i>Catastrophising</i> (+ .6); and <i>Other Blame</i> (+ 1.3), cognitive coping strategies.</p>

General information	Study characteristics		Participant characteristics (in relation to the review questions)		Study results (in relation to the review questions)	
Author, year, country, & quality assessment score	Aims and design of the study	Measure(s) relevant to review questions; standardisation, reliability & validity/data collection	Participant characteristics	Method of recruitment and response rate where reported	Analysis method(s) used	Findings
	<p>negotiators that might be necessary for being a successful negotiator.</p> <p>Quantitative – cross-sectional</p>	<p><u>Standardisation</u></p> <p>Norm sample used for comparison based on 18 – 65-year-old male sample ($N = 242$) from the Netherlands.</p>	<p>questionnaires and are the sample in this review.</p> <p>From the full sample of negotiators ($N = 514$): 78% male ($n = 401$) and the age ranged from 24 to 63 years ($M = 41.31$, $SD = 7.45$).</p> <p>Experience as a negotiator ranged from “newly trained” to 29 years ($M = 6.12$, $SD = 5.60$).</p> <p>74% ($n = 361$) (sample of $n = 488$) indicted they were white.</p>	<p>147 agencies and associations.</p> <p>119 agencies and associations from 38 states returned surveys.</p> <p>27% of invited agencies and associations returned questionnaires.</p>		<p>CIN’s significantly less likely ($p < .05$) to use <i>Rumination</i> (- .64).</p>

Notes:

^a Only data from the qualitative phase (Phase 2) of the thesis were considered here as the quantitative data (Phase 1) were published in the Grubb, Brown, & Hall (2015) paper – Study 3 in this table.

^b Comparison groups were not used for the current review: sample of police officers untrained in CINn ($n = 118$); and a university student sample ($n = 203$).

^c Comparison group of patrol officers untrained in CINn ($n = 78$) was not used for the current review.

^d Not explicit within the article but the author has confirmed that a one-way ANOVA test was used to make comparisons between groups (Table III within the paper). All sub-scales are significant at the $p < .05$ level.

Participant Characteristics

A total of 748 participants were included across the seven studies; 506 in the US and 242 in the UK. All participants were serving police officers, of differing ranks, who had the additional role of CIN.

One study (Spence & Millott, 2016) did not provide any information regarding gender, age, or ethnicity of the participants. The study by Young (2016) appears to have missing demographic data for the CIN sample. For example, Young reported 514 CINs returned a battery of questionnaires, of whom 514 reported their age and gender, and 488 reported their ethnicity. Five hundred and six CINs returned useable CERQ questionnaires and it is this sample that are included in this systematic review; however, the demographic breakdown of this specific group is unknown. The demographic data reported by Young has been included in the synthesis; however, given the caveats with this data and an absence of demographic data provided by Spence and Millott, the overall age, gender, and ethnicity of participants are only estimates.

A large majority of the participants were male ($n = 577$; 77%) with gender mix ranging from 60% (Grubb, 2016) to 96% (Terhune-Bickler, 2005) male. The lowest reported age was 24 years (Young, 2016) and the highest reported age was 63 years (Young, 2016); mean age across the studies was 42.4 years.

Four studies reported the ethnicity of participants (Grubb et al., 2015; Sachs, 1996; Terhune-Bickler, 2005; Young, 2016) which ranged from 73% (Terhune-Bickler, 2005) to 98% (Grubb et al., 2015) white. All studies reported the length of time participants had been an active CIN and this ranged from “newly trained” (Young, 2016), or zero months experience in the case of one participant (Grubb et al., 2015), to 29 years’ experience (Young, 2016); it was not possible to calculate the mean.

Study Aims

Two studies investigated the coping styles and personality characteristics of CINs using comparator groups (Grubb et al., 2015; Young, 2016). Two studies focused on the experiences of CINs who had experienced a negotiation incident that ended in suicide (Bohl, 2001; Terhune-Bickler, 2005). One study explored the attitudes and experiences of CINs involved in suicide prevention and negotiation (Spence & Millott, 2016). One study explored how CINs experience and manage the conflicting demands of the negotiator role in the context of their relationship with the “suspect” (Sachs, 1996), and one study explored the experiences of CINs with the purpose of generating theory about those experiences (Grubb, 2016). Table 3 shows the phenomenon of interest data extracted from each study.

Table 3

Phenomenon of Interest Data Extracted from Each Study

Author	Study Design	Phenomenon of Interest			
		<i>Coping style</i>	<i>Incident-related stress</i>	<i>Incident-related coping strategies</i>	<i>Incident-related support mechanisms</i>
Bohl (2001)	Quantitative		✓	✓	✓
Grubb (2016)	Qualitative		✓	✓	✓
Grubb, Brown, & Hall (2015)	Quantitative	✓			
Sachs (1996)	Qualitative		✓	✓	
Spence & Millott (2016)	Qualitative		✓	✓	✓
Terhune-Bickler (2005)	Qualitative		✓	✓	✓
Young (2016)	Quantitative	✓			

Assessment Measures

Both studies assessing the coping style of CINs used the Cognitive Emotion Regulation Questionnaire (CERQ; Garnefski et al., 2002) to measure the cognitive coping strategies one might use to regulate emotions when experiencing a negative event (Grubb et al., 2015; Young, 2016). The assessment consists of nine sub-scales made from 36-items scored on a Likert type scale of 1 to 5 where higher scores indicate increased use of that strategy.

Unlike Young (2016), Grubb et al. (2015) modified the CERQ by removing question 8 of the *Catastrophising* scale (*'I often think what I have experienced is much worse than what others have experienced'*) as this improved the internal consistency of the scale for their sample from .69 to .74. Grubb et al. reported Cronbach alphas for their sample as ranging from .71 to .82 and Young reported alpha figures for the adult male norm group which ranged from .75 to .86 (Garnefski et al., 2002) indicating internal consistency was good. A second difference between the two studies is the norms used by the researchers. Norms in the CERQ manual are presented separately for gender and age groups. Grubb et al. combined the norms for the adult male and female groups (18 – 65 years) and calculated the average to create a norm group for their study. In comparison, Young utilised the norms provided for the adult male group. Additionally, Grubb et al. combined sub-scales to create two larger sub-scales indicating Adaptive ($\alpha = .7$) (*Acceptance; Refocus on Planning; Positive Refocusing; Positive Reappraisal; and Putting into Perspective*) and Maladaptive ($\alpha = .7$) (*Self-Blame; Rumination; Catastrophising; and Other Blame*) Cognitive Emotion Regulation Styles.

Grubb et al. (2015) used the Coping Skills Test -Revised (CST-R; Jerabek, 2001) to assess the cognitive and behavioural coping style of CINs. A high score on the overall

scale indicates an ability to cope well with problems and high scores on the three sub-scales: Problem-Focused Coping ($\alpha = .89$) (*Problem Solving; Information Seeking; and Negotiation*); Emotion-Focused Coping ($\alpha = .88$) (*Social Support; Positive Cognitive Restructuring; Emotional Regulation; and Distraction*); and Hang-Ups/Maladaptive Coping ($\alpha = .93$) (*Rumination; Avoidance; Helplessness; Social Withdrawal; and Opposition*) indicates greater use of those coping strategies. Grubb et al. created two larger sub-scales for their dataset to measure Adaptive ($\alpha = .8$) (*Acceptance; Refocus on Planning; Positive Refocusing; Positive Reappraisal; and Putting into Perspective*) and Maladaptive ($\alpha = .88$) (*Rumination; Self-Blame; Catastrophising and Other-Blame*) Coping Skills.

Bohl (2001) used a researcher designed questionnaire for the specific purpose of the study. The questionnaire is described in the published article as gathering information on: details about the suicide incident; formal sources of support after the incident; informal support after the incident; symptoms of PTSD; symptoms of work-related problems; and information on the individual's own coping mechanisms. Further information about the questionnaire can be found in Appendix J. The remaining studies used semi-structured interviews (Grubb, 2016; Sachs, 1996; Terhune-Bickler, 2005; Spence & Millott, 2016).

Quality of the Included Studies

The quality scores of the qualitative studies ranged from 41% to 95% ($M = 67\%$). The methodological strengths of the qualitative studies included: the strategies for the recruitment of participants; the way data were collected; consideration of ethical issues; and a clear statement of findings. The main weaknesses were a lack of consideration about the potential introduction of bias by the researcher during the process of generating the

interview questions, in their relationship with participants, and data selection and analysis. The lowest scoring study (Spence & Millott, 2016) also suffered from insufficient data analysis and lack of clarity as to whether there was enough data to support the themes. The study reported using grounded theory, yet no theory was generated.

Only 50% ($n = 2$) of the qualitative studies explicitly considered the researcher's influence during the data analysis and selection of data for presentation (Grubb, 2016; Sachs, 1996) and only one study clearly discussed the findings in relation to the original research questions (Grubb, 2016).

The quality scores of the quantitative studies ranged from 50% to 80% ($M = 65\%$). Methodological strengths of the quantitative studies included: a clearly defined target population; the sample frames were taken from an appropriate reference population; appropriate selection processes; it was clear what was used to determine statistical significance; and the discussions and conclusions were justified by the results. The main methodological weaknesses were a lack of justification of the sample size and lack of data on the non-respondents.

Narrative Synthesis

Data were synthesised to answer each question in this review. The findings are presented here in a manner which addresses each review question in turn. An interpretation of the findings is considered as part of the Discussion section of this report.

What is the coping style(s) of CINs? Two quantitative studies investigated the general coping styles of CINs using psychometric measures (Grubb et al., 2015; Young,

2016). Both studies used the CERQ to measure cognitive coping skills, with Grubb et al. also using the CST-R to measure both behavioural and cognitive coping skills.

Using the CERQ, both studies report that, when compared to norms, CINs are significantly more likely to: accept what has happened (*Acceptance*); think about what steps they can take to deal with the problem (*Refocus on Planning*); think of attaching a positive meaning to the negative event in terms of personal growth (*Positive Reappraisal*); have thoughts of playing down the seriousness of the event when compared to other events (*Putting into Perspective*); and thoughts of putting the blame for what they have experienced on others (*Other Blame*). Whilst norms are not available, it is interesting to note CINs scored higher on the *Adaptive* (as opposed to *Maladaptive*) *Cognitive Emotion Regulation Styles* scale indicating they are more likely to use adaptive cognitive emotion regulation strategies (Grubb et al., 2015).

For each of the original sub-scales, the difference between the means of the norms and participants was greater in the study by Grubb et al. (2015), suggesting UK CINs were more likely to use these coping strategies than their US counterparts. The greatest positive difference between the norms in both studies was for the *Positive Reappraisal* scale indicating negotiators are particularly good at looking for the positive side of an event and thinking it will make you stronger.

Unlike Grubb et al. (2015), participants in the study by Young (2016) reported to be significantly more likely to think of other, more pleasant, matters than the actual negative event (*Positive Refocusing*), and to have thoughts explicitly emphasising the terror of the experience (*Catastrophising*). Whilst differences between the means were not significant, it is interesting to note that participants in the study by Grubb et al. report being less likely to use these strategies. A second difference in results is that, in contrast to

Young, Grubb et al. did not report a statistically significant difference between the means of CINs and norms for the *Rumination* scale.

Using the CST-R, Grubb, et al. (2015) did find that negotiators were significantly less likely to ruminate over events when compared to norms. CINs scored significantly lower on all sub-scales in the Hang-Ups/Maladaptive Coping scale (*Rumination*; *Avoidance*; *Helplessness*; *Social Withdrawal*; and *Opposition*). They also reported CINs scored significantly higher on two of the three Problem-Focused Coping sub-scales (*Problem-Solving* and *Negotiation*) and on one out of four Emotion-Focused Coping sub-scales (*Positive Cognitive Restructuring*). However, the difference between the means for the *Positive Cognitive Restructuring* sub-scale was so large that statistical significance was found for the Emotion-Focused Coping scale overall. This supports the finding by Grubb et al. and Young (2016), using the CERQ, that CINs are significantly more likely to positively reappraise a situation. Again, whilst norms are not available, it can be noted that CINs scored higher on the *Adaptive* (as opposed to *Maladaptive*) *Coping Skills* scale indicating they are more likely to use healthy coping skills.

To summarise, when compared to norms, CINs are more likely to use adaptive cognitive and behavioural coping strategies. They are more likely to use problem-focused coping strategies and are less likely to use hang-up/maladaptive strategies. In relation to emotion-focused coping strategies, CINs are particularly good at challenging negative thoughts to see the positives in a situation. There is inconsistency between the studies in the results for the *Positive Refocusing* and *Catastrophising* sub-scales of the CERQ, and inconsistencies in findings for the *Rumination* scales between the studies and the psychometrics used.

What are the sources of incident-related stress for CINs and how do they experience stress?

Sources of stress. Three qualitative studies (Grubb, 2016; Sachs, 1996; Spence & Millott, 2016) identified sources of stress for CINs. Sachs (1996) categorised the sources of stress as caused by interpersonal (interactions with others), external (operational and organisational problems) and internal (thoughts, feelings, and emotions of the negotiator) sources. Using these criteria, stressors identified by other researchers were allocated to one of these categories for synthesis.

Only the study by Sachs (1996) identified interpersonal sources of stress; these related to the negotiator's relationships with the tactical team, the subject with whom they are negotiating, and concerns that their own family will be worried about them. Some negotiators reported worries over putting the tactical team at risk of harm should they be unable to resolve the incident and a small number of negotiators reported feeling unappreciated by the tactical team, contributing to increased stress. Over half the negotiators in this study reported feeling frustrated at the subject when they fail to keep their word, or for remaining silent. This leads to the internal stressors of the CIN's fear of 'losing control' and of performing poorly in front of colleagues - a stressor also identified by Spence and Millott (2016). The silent subject contributes to the internal stressors of boredom, inactivity, and fatigue (Sachs, 1996).

A lack of operational discipline was reported by CINs to be a source of external stress (Grubb, 2016; Sachs, 1996). Grubb and Sachs found that most negotiators experienced stress due to distractions by colleagues doing or saying things that were inappropriate, or through their failure to create a sterile area, enabling untrained officers, and even the public, to engage in dialogue with the subject.

Sachs (1996), and Spence and Millott (2016), found public scrutiny caused negotiators to become anxious. In addition to members of the public observing at the scene, intense media scrutiny and the prospect of an inquiry into their performance triggered feelings of stress.

Grubb (2016) reported ‘dual-role conflict’ and ‘negotiating solo’ as external stressors facing negotiators. The former refers to the negotiator role impacting on the negotiator’s ability to meet the demands of their day job, such as meeting deadlines. It can also cause tension with managers who need to find cover when the negotiator is called away. Operational difficulties can mean a negotiator is required to negotiate alone until other CINs arrive. This can increase feelings of stress as communications between the scene and silver commander can become compromised and there is no one to share the pressure. The final external stressor identified comes from a known threat, such as potential injury to any person involved in the incident (Sachs, 1996).

Some participants in the study by Sachs (1996) identified an internal stressor as feelings of blame should the incident end in suicide, however, other participants in the same study reported that they do not feel responsible for the death and have no feelings of self-blame.

Experience of stress. Three qualitative studies (Grubb, 2016; Spence & Millott, 2016; Terhune-Bickler, 2005) and one quantitative study (Bohl, 2001) explored the experience of stress for CINs. The findings describe the experience of negotiation as non-stressful (Grubb, 2016); as a ‘different type’ of stress (e.g., more intense but short-lived) (Grubb, 2016); as no more stressful than the negotiator’s day-to-day job (Grubb, 2016; Spence & Millott, 2016) and stress as a positive or beneficial experience (Grubb, 2016;

Spence & Millott, 2016). Beneficial stress, or eustress, was described as providing a challenge (Grubb, 2016) and a sense of excitement and anticipation (Spence & Millott, 2016).

In the only study to explore symptoms of anxiety and PTSD experienced by CINs, Bohl (2001) presented participants with a list of symptoms and asked them to tick which ones they had experienced, and to rate the severity and duration of them, using a Likert type scale (see Appendix J for further details of the Likert scales used). CINs reported anxiety symptoms, including changes in the perception of time, sound, and visual detail. Spence and Millott (2016) also found that CINs feel anxious during negotiations with suicidal subjects, although specific symptoms were not identified. In terms of PTSD symptoms, Bohl reported that although most of the participants admitted to experiencing the full range of PTSD symptoms presented to them, they reported that the symptoms did not last long (approximately one month) and had only a mild effect on their lives, coping abilities, and functioning on the job. The most frequently reported symptoms were: a sense of loss of control over things; depression; flashbacks; and feeling a heightened sense of danger, vulnerability, and irritability. There were no significant correlations between the number of prior incidents attended and the number, severity, and duration of reported PTSD symptoms or work-related problems, indicating symptoms do not accumulate.

One participant in the study by Terhune-Bickler (2005) reported being diagnosed with PTSD by a psychologist following attendance at an incident that had ended in the subject committing suicide. This participant reported flashbacks associated to the incident and re-playing the event over in their mind that lasted six months or more. For most participants in this study, memories of the incident(s) resurfaced at future negotiation incidents, irrespective of the type of incident.

Bohl (2001) presented a list of potential work-related problems to participants. Participants reported experiencing the full range of difficulties though, similar to PTSD symptoms, they lasted only briefly and had only a mild effect on their work. The most commonly reported difficulties were: distrust of the department; lowered self-confidence; distrust of peers; and fears for the future.

Overall, the research suggests that sources of stress for CINs can be categorised as coming from interpersonal, external, and internal sources. Sources that appear to cause the most stress are lack of operational discipline, public and professional scrutiny, and fear of poor performance in front of colleagues. The types of stress experienced by CINs ranges from symptoms of anxiety and PTSD at one end of the scale to beneficial/positive stress at the other. The severity and duration of symptoms of anxiety and PTSD seems to be low.

What coping strategies are adopted by CINs to cope with incident-related stress? All four qualitative studies (Grubb, 2016; Sachs, 1996; Spence & Millott, 2016; Terhune-Bickler, 2005) and one quantitative study (Bohl, 2001) explored the coping strategies adopted by CINs to cope with the stressors experienced in the negotiator role. Coping strategies were categorised as adaptive or maladaptive according to how they had been interpreted by the primary researcher or are generally viewed within the coping literature (e.g., Carver, Scheier, & Weintraub, 1989; Skinner, Edge, Altman, & Sherwood, 2003).

Adaptive coping strategies. Peer support was a coping strategy reported by most participants in all five studies. It was not always clear whether ‘peer support’ referred to only those peers within the negotiation team or was inclusive of colleagues outside of the

team. Most participants used support provided by their spouse, family, and/or friends (Bohl, 2001; Grubb, 2016; Spence & Millott, 2016; Terhune-Bickler, 2005); however, this was not always the case and some participants preferred not to discuss their experiences with their spouse (Spence & Millott, 2016). For some negotiators the situation they had been involved in would dictate whether they would prefer to talk to their spouse, other family member, or a colleague (Grubb, 2016). Details about how negotiators choose their preferred person for support was not reported. Two studies found formal debriefing procedures were good coping strategies for allowing negotiators to vent and for self-reflection (Bohl, 2001; Sachs, 1996). Self-reflection was considered an important process by some negotiators in the study by Sachs (1996) for learning and performance improvement. It was also a positive exercise for negating performance concerns as feedback during de-briefing would indicate they had critiqued their performance according to their own standards rather than the standards of others, which were not set as high (Sachs, 1996).

Other coping strategies were the use of humour (Sachs, 1996; Spence & Millott, 2016; Terhune-Bickler, 2005); training (stress management, and normalising and suppressing emotions) (Sachs, 1996); and exercise/sport (Grubb, 2016).

Maladaptive coping strategies. Externalising responsibility for negative outcomes was a coping strategy used by almost half the negotiators in the studies by Sachs (1996) and Terhune-Bickler (2005). This involved a cognitive appraisal of the situation where decisions and actions leading to the outcome had been made by other people. Avoiding negative feelings associated with the event was reported by Bohl (2001). Increased alcohol

consumption (Bohl, 2001; Grubb, 2016; Sachs, 1996) and increased smoking (Bohl, 2001) were used as coping strategies by a minority of negotiators.

Collectively the evidence would suggest that making use of social support is the primary coping strategy of CINs. Debriefing procedures are also viewed as important, along with humour, training, and exercise. Avoidance strategies of externalising responsibility and not thinking about one's feelings were effective coping strategies for some.

What support mechanisms are available to CINs and what are the views of CINs in relation to them? Three qualitative studies (Grubb, 2016; Spence & Millott, 2016; Terhune-Bickler, 2005) and one quantitative study (Bohl, 2001) explored the support mechanisms available to CINs and how negotiators view them.

Social support from a spouse, friends, negotiation team peers, and/or co-workers was viewed as an important support mechanism by all negotiators (Bohl, 2001; Grubb, 2016; Spence & Millott, 2016; Terhune-Bickler, 2005). Formal debriefing procedures to identify areas of good practice, and areas for improvement, were considered helpful for most negotiators across the four studies; however, the type and availability of services in the UK differed depending on the policies in place for each police force (Grubb, 2016; Spence & Millott, 2016). Almost half the participants in the study by Bohl did not access any form of formal support but it is not known whether this was through choice or a lack of opportunity. Some CINs felt psychological support was provided as part of formal debriefing (Grubb, 2016; Spence & Millott, 2016) while others felt post incident debriefing was primarily incident focused (Spence & Millott, 2016).

Formal occupational health and welfare provision was only available to negotiators in the UK studies (Grubb, 2016; Spence & Millott, 2016); however, not all participants were aware of the type of services available, or how to access it (Spence & Millott, 2016). The two studies conducted in the US addressing this review question reported access to mental health services was available (Bohl, 2001; Terhune-Bickler (2005). This included critical incident debriefing which was a service also mentioned by one participant in the study by Grubb.

Half the participants in the study by Bohl (2001) chose to be debriefed by a mental health professional, following an incident that ended in suicide, with the majority of those reporting it as ‘very helpful’ or ‘somewhat helpful’. In contrast, Terhune-Bickler (2005) found most participants did not access mental health services claiming they did not think it would be helpful. Terhune-Bickler attributes non-attendance to perceived stigma associated with help-seeking. Spence and Millott (2016), however, reported all participants would use welfare support services despite mixed views among participants regarding help-seeking stigma. Some participants in the study by Spence and Millott felt a mandatory referral to welfare support services might be helpful for those reluctant to seek support; however, a minority of participants in the study by Terhune-Bickler felt such an approach may be punitive. Some CINs in the study by Grubb had a mandatory annual psychological health check, though their views on this are unknown.

Lack of practical support/resources (e.g., appropriate clothing and mobile phones) and formal psychological support was reported as an issue in one UK study (Spence & Millott, 2016) and lack of formal psychological support was reported by both US studies (Bohl, 2001; Terhune-Bickler, 2005). Other support mechanisms identified were use of a buddying/shadowing system (Grubb, 2016), the ability to temporarily “step

off the rota” (Grubb, 2016), and receiving positive feedback to protect against a sense of personal failure (Terhune-Bickler, 2005).

The findings suggest that social support is a key support mechanism for the psychological care of CINs. Formal debriefing procedures and access to welfare services are viewed as important by most participants, though they are not always accessed, and the availability of services was varied, even within the same country.

Discussion

The specific objectives of this review were to: identify the coping style(s) of CINs; identify the sources of incident-related stress and explore how they experience stress; to explore the coping strategies adopted by CINs to cope with incident-related stress; and to identify the support mechanisms available to CINs and how they view them. The findings in relation to each objective will be discussed.

The search strategy was considered a strength of this review, but it was not especially surprising that a small number of empirical studies met the inclusion criteria. The scoping search did identify a reasonable body of literature concerning stress and coping for CINs, however, these were mostly narrative reviews and papers based on the experiences of CINs rather than empirical studies. The number of databases searched, manual searching of reference lists, contact with experts, and inclusion of grey literature allows confidence that the search strategy identified most, if not all, relevant studies published in English.

Seven studies met the inclusion criteria; two studies adopted a cross-sectional design using psychometric assessments to measure the general coping styles of CINs (Grubb et al., 2015; Young, 2016); four adopted a qualitative design using interviews to

explore incident-related phenomenon of interest (Grubb, 2016; Sachs, 1996; Spence & Millott, 2016; Terhune-Bickler, 2005); and one study adopted a quantitative design, using a researcher designed questionnaire, to explore incident-related phenomenon of interest (Bohl, 2001). One study scored below 50% on the quality assessment criteria, indicating methodological weaknesses (Spence & Millott, 2016). This was a qualitative study with weaknesses identified with regard to inadequate reporting of potential researcher bias, insufficient data analysis, and not having enough data to support the themes. It is considered these weaknesses were mediated somewhat by all relevant data for the review questions being extracted, irrespective of the theme label it had been assigned. It is possible this study was subject to publication bias due to boundaries put on word limits which are difficult for qualitative studies to achieve (Petticrew & Roberts, 2006). It is possible, therefore, that the study was methodologically sound but that the reporting of it was poor. It is also worth noting that the studies by Grubb et al. and Young included participants that were newly trained, with Grubb et al. being explicit that at least one of their participants had not attended a negotiation incident. As both studies examined psychological constructs of trained CINs (which they all were), and not their experiences of negotiation, their data are considered valid for this review.

Two quantitative studies investigated the coping styles of CINs using established psychometric measures (Grubb et al., 2015; Young, 2016). Using the same assessment tool to measure cognitive emotion regulation strategies (CERQ), both studies found that CINs are more likely to use adaptive and problem-focused coping strategies and less likely to use hang-up/maladaptive strategies. Both studies also found that CINs are particularly good at challenging negative thoughts and to see the positive side of a situation. In contrast to Grubb et al., Young found that CINs were more likely to refocus their thoughts onto

more pleasant matters when faced with a negative event and to catastrophise more. Young also found CINs were significantly less likely to ruminate. It was interesting to find that the difference between the means for norms and participants, for several of the sub-scales, was greater in the study by Grubb et al. than those found by Young. This could suggest that UK CINs are more likely to use those coping styles than US CINs; however, it is important to remain mindful that the two studies used different groups of norms which could account for the differences in findings. Grubb et al. used an average of the mean scores for the male and female adult norms while Young used only the adult male norms. Given that both studies had male and female participants it could be argued that the norms used by Grubb et al. provide a more suitable comparison group, thus more reliable results. The methodological quality of the study by Grubb et al. is also stronger, though Young had a larger sample size, giving weight to those findings.

A second possible explanation for the discrepancy in results for the *Catastrophising* scale is that Grubb et al. (2015) modified the questionnaire by removing a question from this scale. Consequently, the scales used for the two studies are not synonymous. The lack of statistical significance for the *Rumination* scale reported by Grubb et al. is interesting; however, on closer examination, the difference between the means of CINs and norms was greater in the study by Grubb et al. meaning the lack of statistical significance can be explained by Grubb et al. setting a higher significance level. Specifically, Young (2016) found significance at the $p < .05$ level while Grubb et al. sought significance at the $p < .002$ level. A greater difference between the means was therefore required in the study by Grubb et al. to achieve statistically significant results.

Grubb et al. (2015) did, however, find a high level of statistical significance for CINs being less likely to ruminate using the CST-R questionnaire. This inconsistency with

the same participant sample could be explained by the *Rumination* scale in the CERQ having only four items which is less than the recommended 10 for good bandwidth (Kline, 2000). It is possible, therefore, that the items do not tap into all aspects of rumination which could explain the lack of statistical significance.

Three qualitative studies found that stress was caused by interpersonal, external, and internal sources (Grubb, 2016; Sachs, 1996; Spence & Millott, 2016). The quality of these studies ranged from 41% to 95%. A variety of sources for the causes of stress were identified but this is perhaps to be expected given the different research aims would have required different interview questions, thus exploring different areas of the CIN role and experience. It is also likely that participants had different overall experiences as the selection criteria was different for each study. Consequently, although the same sources of stress were not consistently identified across studies it is possible they are more common than this review would suggest. Indeed, stressors involving tactical teams, which was identified by just one study (Sachs, 1996), is in line with previous research that the opposing approaches of the negotiation and tactical teams to managing hostage/crisis situations can lead to conflict (Vecchi, 2006).

Looking at the experience of stress, the finding that negotiation was non-stressful and can involve beneficial stress was surprising as the literature focuses on the impact of negative stress, albeit the majority is not based on empirical work (Bohl, 1992; McMains & Mullins, 2015; Norton & Petz, 2012; Strentz, 2012). The study by Bohl (2001) found all participants experienced a range of PTSD and anxiety symptoms following attendance at a negotiation situation that ended in suicide, though the symptoms did not last long and were not severe. The response rate in this study was low and there are several methodological weaknesses that the results should be treated with caution. Crucially the sample size was

small, and the data were collected via an untested questionnaire developed by the researcher. Bohl reported that participants experienced depression, but it is not known whether this was a clinical diagnosis or self-report, and the method of identifying the list of PTSD and anxiety symptoms is unknown.

Four qualitative studies (Grubb, 2016; Sachs, 1996; Spence & Millott, 2016; Terhune-Bickler, 2005) and one quantitative study (Bohl, 2001) reported findings on the coping strategies adopted by CINs to cope with incident-related stress. The existing literature provides mixed evidence on the benefits of peer and social support following traumatic events (e.g., Bakker et al., 2015; Prati & Pietrantonio, 2010) and this appears to be the case in the current review. Although not a statistically significant result, the quantitative study by Grubb et al. (2015), using the CST-R questionnaire, found CINs were less likely to use social support as a coping strategy when compared to norms. In contrast, most participants in the qualitative studies reported the benefits of peer and social support, though this was not always the case (Grubb, 2016; Spence & Millott, 2016). It is possible that the data collection methods account for this difference as the interaction between researcher and participant during interviews permits deeper exploration of the area. Specifically, the interview setting allows the participant to express idiosyncrasies that the helpfulness of social support can be dependent on the situation and the relationship of a person to them. Such detail cannot be explored via psychometric questionnaires.

The finding from the qualitative studies of Sachs (1996) and Terhune-Bickler (2005), that almost half their negotiator samples externalise responsibility for negative outcomes, fits with the findings of the quantitative studies by Grubb et al. (2015) and Young (2016) that CINs are significantly more likely to blame others for what they have experienced, when compared to norms. Ordinarily considered a maladaptive coping

strategy, other-blame/externalising responsibility could be an adaptive strategy for the negotiation scenario as it is an accurate appraisal of the situation that actions, and decisions, *are* taken by others. This is supported by Strentz (2012) who advises CINs should not take sole responsibility for a negative outcome. Indeed, Lazarus and Folkman (1987) advise caution in categorising coping strategies in one particular group as a strategy may be adaptive or maladaptive/problem- or emotion-focused depending on the context.

Three qualitative studies (Sachs, 1996; Spence & Millott, 2016; Terhune-Bickler, 2005) found that humour was a common coping strategy though it was not clear what type of humour this related to. This is an important point as research suggests only good-natured humour is effective at increasing positive, and decreasing negative, emotions (Samson & Gross, 2012), and aggressive or self-defeating humour has a detrimental effect on psychological wellbeing (Martin, 2007).

Data were extracted from four studies to answer the question regarding incident-related support mechanisms (Bohl, 2001; Grubb, 2016; Spence & Millott, 2016; Terhune-Bickler, 2005). Support mechanisms can be categorised as formal (provided by the organisation) and informal (self-sourced). Several sources of support were identified by participants in the UK and US studies. Formal occupational health and welfare services were available to negotiators in the UK, though availability of services varied. The importance of, and inconsistencies with, peer and social support has already been discussed. Grubb (2016) found two support mechanisms not reported in any other study; a buddying/shadowing system and “stepping off the rota”. Again, it is possible that these mechanisms were available for CINs in other studies within this review, but the interview questions did not tap into understanding mechanisms of support in sufficient depth.

The data for this review question lacked clarity in relation to the views of CINs, particularly in relation to the formal support available from occupational health (UK) and mental health services (US). Considering where the methodological weaknesses lie in these studies, it is most likely that the limited understanding can be accounted for by the different interview questions and depth of exploration of this area during interview. Looking at the relevant US studies, half the participants in one study (Bohl, 2001) and most participants in the second study (Terhune-Bickler, 2005) did not access support from mental health services. It is not clear whether all participants had the same ease of access to this service and so whether lack of attendance was due to participant choice or lack of opportunity. Terhune-Bickler postulates whether not attending mental health support is related to stigma associated with help-seeking, though the actual reason(s) is unknown. The majority of those that did access the service in the study by Bohl reported it was helpful. Interestingly, despite most participants not accessing mental health services, a lack of formal psychological support was reported as a concern in both studies. Only one UK study offered insight into the views of CINs in accessing occupational health services (Spence & Millott, 2016) and it is encouraging that, whilst views were mixed in terms of the perceived stigma associated with help-seeking, all CINs reported they would access the service if they needed it.

Strengths and Limitations of the Current Review

It is important to consider the strengths and limitations of this review through a critical appraisal of the review process and considering the quality of the evidence upon which the findings have been drawn. The search strategy has already been discussed as a strength of the review. Publication bias was minimised through: the search of nine

databases; by contacting experts; manually searching reference lists; including peer- and un-reviewed studies; and including doctoral theses. It is also a strength that all studies meeting the inclusion criteria were included in the review; however, language bias was introduced by only including studies published in English, potentially excluding relevant studies. A total of 25 non-English language references were identified across all the databases searched, though the number of duplicates, and those that would have met the inclusion criteria, is unknown.

To improve the validity of the review, a second psychologist screened the references using the SST, and quality assessed two studies. However, due to time and researcher resources, only one researcher extracted the data for synthesis, potentially introducing bias in selecting which data to extract. To minimise the chance of excluding a relevant study, abstracts were read in full and full-texts were retrieved where there was any uncertainty on relevance to the review. This area was new to the researcher and there were no preconceived ideas as to what the review might find. As such, the risk of bias in the researcher only extracting data that would support, or disprove, a hypothesis was not of concern; however, it is acknowledged that some relevant data may have been overlooked in the qualitative studies and not extracted.

The methodological quality of the included studies has already been detailed but it is worth highlighting that the lack of variability in the participant characteristics makes it difficult to generalise these findings. Specifically, CINs working outside of the police are not included in this review and findings are limited to western samples. Females and individuals from a non-white ethnic background are under-represented in these samples; however, lack of information about non-respondents means the demographic breakdown of the whole CIN samples available to the researchers is unknown.

Implications for Practice and Future Research

Following this review, recommendations for practice can be made. Several studies identified factors that cause frustration, or anxieties, for CINs during the course of negotiations. These findings would suggest training for CINs to improve awareness of the range of emotions they may feel, and how they can manage those emotions during incidents, could be beneficial. The finding that a lack of operational discipline from colleagues, is a source of stress, would suggest that training may be beneficial for non-negotiator staff as to how they can best support their colleagues on the front line of negotiations. In terms of support mechanisms, the literature suggests that not all negotiators are aware of how to access services, or, indeed, what services are available to them. It is therefore recommended that information on the formal support services available, and how they can be accessed, should be provided.

This area of research is very much in its infancy and there is much scope for further research to broaden understanding of this role. Quantitative research could compare the general coping style of CINs with the coping strategies they employ during and/or after a negotiation incident. The CERQ used in the studies within this review would be a useful tool as it can be used to assess general and situation-specific cognitive coping styles. The Coping Inventory for Stressful Situations (CISS; Endler & Parker, 1999) would be a useful tool to examine general cognitive and behavioural coping as it also has a situation-specific coping version (CISS: SSC; Endler & Parker, 1999), again allowing comparisons to be made. The psychometric properties of the CISS have been critiqued in Chapter 4 of this thesis. Stress and anxiety symptoms could be measured using a valid and reliable assessment tool to improve the method employed by Bohl (2001).

Qualitative research should examine factors that can only really be understood through the rich data captured using qualitative methodology. Whilst the evidence is currently limited, this review highlights that stress is experienced on a continuum from positive to psychologically harmful stress. A recommendation is made that stress should now be explored as a specific research aim to gain a better understanding of its sources and the CIN's experience of stress. This should include exploration of the coping strategies employed, and the views of CINs with respect to available support mechanisms, in order to address the lack of clarity identified in this review. Future research needs to expand its focus to include CINs working in non-police settings and include more female participants and those from a non-white ethnic background.

Conclusion

This review identified that there are few empirical studies exploring the general coping styles of CINs, and their incident-related experiences of stress, coping, and support. Furthermore, the research has been limited to police CINs and to UK and US samples. Females and those from a non-white ethnic background are potentially under-represented in those sampled.

The findings from the review indicate CINs generally use adaptive coping strategies, which include a range of problem-focused coping strategies and the emotion-focused strategy of reappraising negative events to see the positive side of a situation. A number of stressors were identified across the studies and, following synthesis, the main stressors were identified as a lack of operational discipline, performance anxiety, and scrutiny from others. It was interesting to find that stress is experienced on a continuum from being beneficial for the role to experiencing symptoms of anxiety, even PTSD, given

the focus of the non-empirical literature leans firmly towards negotiation stress as being a negative experience. The review identified that the most favoured coping strategies for CINs are attending post-incident debriefs, using humour, and applying the skills/knowledge acquired from training. In relation to the benefits of social support, the findings of this review are in line with the literature for similar professions in that they are inconclusive. The qualitative studies in this review do, however, provide largely positive findings. The formal support mechanisms of occupational health/welfare and mental health services were generally viewed positively, and many participants wished for improved access to psychological support. Further research is now required to advance knowledge in understanding the negotiator's experience of performing this critical role.

CHAPTER 3

A QUALITATIVE STUDY EXPLORING THE EXPERIENCES OF PRISON OFFICER NEGOTIATORS IN HER MAJESTY'S PRISON AND PROBATION SERVICE

Abstract

A systematic literature review of the experiences of critical incident negotiators failed to identify one study with a sample of negotiators working in a prison setting. The current study is the first to address this gap in knowledge by utilising a qualitative methodology to explore the experiences of prison officer negotiators. Semi-structured interviews were conducted with fourteen prison officer negotiators based in public sector prisons in the north-west of England. Using thematic analysis, five overarching themes were identified relating to: the characteristics of serious incidents; stressors; the experience of stress; use of coping strategies; and use of support. An underlying theme was identified, which weaved through the overarching themes, relating to negotiating within the structure of a prison regime. The findings are discussed in relation to the existing literature with police officer negotiators and the occupational literature of prison officer work. Considering the findings of this study, recommendations are made with respect to practice and further research.

“[after] an incident... you just automatically go on to your next job, you just carry on, prisons are constantly rolling, it never stops, time doesn’t stop for no man... being a prison officer is like being Worzel Gummidge, you take your head off and put your new one on and carry on; whether that be teacher, counsellor, social worker...” [Participant quote]

Introduction

The concept and definition of a critical incident was discussed in Chapter 1 (see p. 4). Ireland, Halpin, and Sullivan (2014) defined critical incidents in secure forensic psychiatric settings as “any substantial event that can disrupt everyday living for an individual and which requires the expertise of others to intervene in its management” (p. 715). This is the closest definition to explain a critical incident in a prison setting, though Her Majesty’s Prison and Probation Service (HMPPS) use the term ‘serious incident’ (Walsh, Davies, Bagshaw, & Payne, 2012).

Prison officers deal with serious incidents every day in UK prisons. Recent government statistics revealed assaults (including serious assaults¹) on both staff and prisoners, and incidence of self-harm, have reached record highs (Ministry of Justice, 2018). For example, in the 12 months to September 2017, there were 7,828 assaults on staff, up 22% from the previous year. Of these, 787 were serious assaults, up 3% on the previous 12-month period. During the same 12-month period to September 2017, there were 20,346 prisoner-on-prisoner assaults, up 9% from the previous 12-month period. Of these, 2,961 were serious assaults, up 11% from the previous year. The number of self-

¹ Serious assaults are those which fall into one or more of the following categories: a sexual assault; requires attention in outside hospital as an in-patient; requires medical treatment for concussion or internal injuries; or incurs any of the following injuries: a fracture, scald or burn, stabbing, crushing, extensive or multiple bruising, black eye, broken nose, lost or broken tooth, cuts requiring suturing, bites, temporary or permanent blindness (Ministry of Justice, 2018)

harm incidents reached a record high of 42,837 in the 12 months to September 2017, up 12% from the previous year. The number of those incidents requiring hospital attendance was 3,007, an increase of 15%. The current paper will focus on serious incidents which require the deployment of a specialist trained team(s) to bring about a resolution. In HMPPS, these incidents typically include: riots; barricades; incidents at height; hostage situations; and concerted indiscipline². All staff involved in the management of serious incidents in HMPPS are required to follow the policy stipulated in Prison Service Instruction 09/2014 Incident Management Manual³.

The Management of Serious Incidents in HMPPS

The safety of prisoners and staff is a priority at all times. During a serious incident, the most senior ranking governor in the establishment will normally assume the role of silver commander and manage the incident from the silver command suite. There are a number of specialist trained teams of prison officers that the silver commander can call upon to assist in the management of serious incidents, including: Tornado; National Tactical Response Group (NTRG); National Dog and Technical Support Group (NDTSG); and negotiators. Government figures for the number of times Tornado teams and NTRG have been deployed indicate an increase in the number of serious incidents across the prison estate from 2015 to 2016. During 2016, Tornado teams were deployed 19 times, an increase of 11% from the previous year ($N = 17$); and NTRG were deployed 583 times, an

² Figures are not available for the number of riots, barricades, incidents at height, hostage situations, and concerted indiscipline, as this information is not held centrally. Further, incidents considered as minor may not always be recorded at local level (by each prison), meaning any figures would need to be treated with caution.

³ It is not possible to provide any detail regarding the Incident Management Manual due to its Protected/Restricted status.

increase of 62% from the previous year ($N = 363$) (Parliamentary Archives, 2016, 2017).

In the more serious incidents, the gold command suite⁴ may be opened in order to provide strategic and operational oversight to the management of the incident.

The purpose of most of the specialist teams available to the silver commander to resolve a serious incident is to bring about a resolution through tactical intervention; however, the preferred method is to achieve a peaceful resolution through negotiation. Negotiators in HMPPS are prison officers who have completed additional training to perform this specialist role. Similar to police negotiators (Grubb, 2016; Spence & Millott, 2016), this is a voluntary role, undertaken in addition to their day-to-day prison officer duties. Unlike police negotiator training, reported by Grubb (2016), training is delivered at a national level, so all prison officers receive the same training no matter where they are based.

Selection, training, and deployment of negotiators. As noted above, negotiators in HMPPS are prison officers who have volunteered for the role. To be selected for training, the prison officer must have expressed an interest in the role and had approval to attend the training from their line manager. Line managers may also approach prison officers whom they consider as having good communication skills with prisoners to see if they would be interested in attending negotiator training. The manager's decision to refer an officer for training is based on their knowledge of the officer and on whether the establishment has a need for a trained negotiator.

To become a negotiator, candidates are required to pass a two-stage mandatory training programme. The training is designed by HMPPS national training services in

⁴ If deemed appropriate by the silver commander, a gold commander will be requested to provide support. The gold commander is a senior HMPPS manager who provides strategic and operational oversight of the incident from a location outside of the prison. This location is referred to as the gold command suite.

consultation with HMPPS psychologists. It is delivered by HMPPS national training services by tutors who have passed negotiator training, many of whom will have also worked as a negotiator. A negotiation advisor⁵ will also assist with the assessment of candidates and provide constructive feedback for growth and development. The first stage of training requires the candidate to pass a 'Pre-development' day. This involves an introduction to the negotiator role and the opportunity to experience the role via roleplay exercises using mock situations. Candidates must demonstrate a level of skill, according to set criteria⁶, to the satisfaction of the tutors and NA to progress to the second stage of 'Basic' training. Basic training is a three-day course which includes knowledge giving and skills-practices. Candidates will learn: the Behavioural Influence Stairway Model (BISM; Vecchi, 2009) of negotiation; the role and responsibilities of the negotiator; and the communication strategy with the silver commander.

Candidates have the opportunity to implement their knowledge through a series of serious incident roleplay scenarios, all of which are assessed by tutors and the NA. Feedback from the assessors allows the candidate the opportunity to develop throughout the course. In order to pass the course, the candidate's performance must meet the set criteria⁷ to the satisfaction of the assessors. Candidates that pass the Basic training are deemed competent to act as negotiators and can commence the role immediately. Those that fail to demonstrate the required level of competence will be advised of the areas they need to develop should they wish to attend training again in the future. In order to maintain

⁵ A negotiation advisor is a Health and Care Professions Council registered psychologist employed by HMPPS. Their role is to advise the silver commander on negotiation strategy and tactics, to provide support to negotiators in implementing strategy, and to monitor the wellbeing of all staff involved in managing the incident. Please see pp. 3-4 and pp. 81-82 for further information on the role.

⁶ The set criteria includes demonstrating: good listening skills; ability to demonstrate empathy; ability to remain calm; be able to step out of the authority role; and the ability to develop rapport.

⁷ In addition to the assessment criteria at the Pre-development day, candidates must demonstrate an ability to implement the BISM negotiation model.

their negotiator status, negotiators must pass a mandatory two-day ‘Refresher’ training course every two years. This training provides negotiators with a brief recap of the knowledge learned on Basic training followed by a series of assessed roleplay scenarios. In terms of deployment, negotiators are contacted by the silver commander to request their attendance; this can be during their shift or whilst they are off duty.

In recognition of the diverse range of incidents attended by its negotiators, HMPPS no longer prefaces the role of the negotiator with the popular descriptor terms, ‘hostage’ (Norton & Petz, 2012), ‘crisis’ (Romano, 2003; Strentz, 2012) or ‘critical incident’ (McMains & Mullins, 2015); they are simply referred to as ‘negotiators’⁸.

Selection, training, and deployment of negotiation advisors. As noted in Chapter 1 (see pp. 3-4), a negotiation advisor may also be deployed to assist in designing negotiation strategy and supporting negotiators in its implementation. Negotiation advisors are Health and Care Professions Council registered psychologists who have expressed an interest in undertaking the role. Interested psychologists must attend mandatory training that has been designed by HMPPS senior management psychologists and NAs. The four-day training programme is delivered at a national level by active NAs and includes: developing understanding of the principles of negotiation; understanding the role of the NA in the management of serious incidents; and practical sessions on matching negotiation strategy to the type and stage of an incident. This is not a pass/fail course; however, newly trained NAs will shadow experienced NAs until they feel confident to attend an incident on their own.

⁸ Data pertaining to trained negotiators is held by each establishment rather than in a central location. As such it has not been possible to identify how many negotiators are currently working in HMPPS. There is no minimum or maximum number of trained negotiators that each prison is required to have, and it is not the case that the larger (or smaller) the prison is then the greater (or lower) the number of negotiators they will have. Some prisons have no trained negotiators while others may have many.

On a practical level, the deployment of NAs to serious incidents differs across the geographical regions of HMPPS. In the north-west region, where the current research was conducted, NAs work on a monthly rota where they are the first point of contact for north-west prisons requiring NA support; this service is permanently available. Whilst the NA acting as the first point of contact is not required to attend the incident, it is their responsibility to identify and deploy an available NA.

Negotiation in Forensic Settings

Negotiation situations are often described in terms of a conflict or crisis situation. A crisis has been defined as a situation which the individual perceives as having insurmountable obstacles, which they feel unable to deal with (Carkhuff & Berenson, 1977). This behaviour tends to be emotionally expressive, without rational thought, and has an absence of demands. In contrast, a conflict situation is where an individual engages in extreme behaviour in response to their perception that their needs have become blocked (Vecchi, 2009). This behaviour tends to be goal-oriented, with an element of planning. Ireland (2017) suggested that critical incidents are best regarded as falling along a continuum of crisis or conflict, as incidents can present with elements of both. This is a useful perspective because, as the incident evolves, it has the potential to shift; so, what may have begun as a conflict situation, may become a crisis, and vice versa.

Understanding critical incidents in forensic settings. Understanding the motivation of the perpetrator engaging in critical incident behaviour, is key to the development of strategy for negotiators to implement. Mason (2000) proffered that forensic patients may engage in protest type behaviours as a consequence of feeling “trapped, powerless and thwarted” (Mason, 2000, p. 272). This explanation can easily be

generalised to prisoners, who are required to live by the rules and regime of their confined environment.

In a qualitative study exploring the motivation of forensic patients for engaging in critical incident behaviours (specifically hostage-taking, barricades, and roof-top protests), Ireland et al. (2014) conducted semi-structured interviews with 16 patients who had a critical incident history. Using thematic analysis, they identified five themes: '*Seeking deliberate isolation from others*'; '*Gaining control*'; '*Getting your needs met*'; '*Not being listened to/a need to communicate*'; and '*Peer influences*'. It appears that all participants in this study had made a conscious decision to engage in their behaviour. Whilst the study appears to be methodologically sound, its findings are limited to male psychiatric patients. In the absence of any literature exploring the motivation for these critical incident behaviours in non-males and non-psychiatric samples, the motivation in females and those in prison is currently unknown. Considering the similarities of psychiatric hospitals and custodial settings, in terms of the constraints imposed by the physical environment and regime, it could be surmised that there may be more similarities in motivation than differences. It is noted that this study did not include patients that had engaged in the crisis behaviour of deliberate self-harm. It is not known whether this was because they were not considered critical incidents or whether it was due to ethical concerns, such as wellbeing or the ability to provide informed consent.

Whilst understanding the motivation of the behaviour is helpful for managing a specific incident, understanding the function can assist in the identification of factors that may act as a barrier, or protective factor, to critical incidents in the future. This would have benefits for the individual in managing distress, and for the organisation in terms of reducing disruption to the regime, and impact on its resources.

In a qualitative study exploring the perspectives of perpetrators of critical incidents, McNeill, Ireland, Chu, and Ireland (2018a) interviewed 13 male perpetrators of hostage-taking, barricading, and protest behaviours, in a high-secure psychiatric setting. Using a SORC functional assessment framework to organise the data, and thematic analysis to analyse the data, McNeill et al. identified six themes to explain the function of the behaviour: *'To achieve a specific goal'*; *'To cope with or remove difficult emotions/symptoms'*; *'To make others listen'*; *'To gain a positive experience and/or emotions'*; and *'Establish a sense of power/control'*. McNeill et al. noted that a single incident tended to serve more than one function. Again, those that had engaged in self-injurious behaviours were not included in the sample. As with all self-report data, the accuracy of the data is subject to participant insight into their behaviour. Further, participants may intentionally distort their responses to something they perceive as more socially desirable. This is particularly relevant, given the finding by Ireland et al. (2014), that peer influences were a motivating factor to engaging in critical incidents.

In the first study of its kind, McNeill, Ireland, Chu, and Ireland (2018b) interviewed 20 experienced crisis negotiators to explore their perceptions of the function of perpetrator critical incident behaviour. Six themes were identified: *'To achieve goals/get needs met'*; *'To seek deliberate isolation from others by removing self from threatening environment'*; *'To gain control'*; *'To manage/cope with difficult emotion'*; *'To gain an opportunity for reflection'*; and *'To fulfil a need to communicate and be listened to'*. The sample size of this study was good for qualitative research, and it included negotiators working in a variety of settings enabling a range of experiences to be gathered: police ($n = 10$), prison ($n = 3$), and a secure psychiatric hospital ($n = 7$); however, by amalgamating

the data from the three settings, this does not allow for any differences in views and experiences to be identified.

Across these three studies, it is interesting to note that there is much overlap between the themes identified from perpetrator and negotiator responses for the motivation and function of critical incident behaviour. The one theme that was not found in another study was the influence of peers as a motivation for critical incidents, as identified by perpetrators (Ireland et al., 2014).

The Experience of Negotiators

The systematic literature review presented in Chapter 2 explored the empirical literature pertaining to the experience of stress, coping, and support mechanisms for critical incident negotiators (CINs). That literature is of relevance to the current study and key studies from the review will be discussed here. The non-empirical literature will also be drawn on.

Stress. There is consensus in the existing literature that negotiators work in highly pressurised situations (e.g., Bohl, 1992; McMains & Mullins, 2015; Strentz, 2012). The systematic literature review in Chapter 2 identified both beneficial and detrimental effects associated with the stress experienced by negotiators. This finding aligns with the model of stress proposed by Folkman and Moskowitz (2000, 2004) discussed in Chapter 1 (p. 7), that stressors can evoke both positive and negative affect, which may even co-occur in the same stressful situation. Given the potential for stress to have a negative impact on performance (Yerkes & Dodson, 1980), understanding the sources of stress and experience of stress for CINs is essential. The importance is related not only to ensuring they can

perform at the highest level, to achieve a positive outcome, but also for their long term physical and psychological health (Leviton, 2004; Rosenbluh, 2001).

The literature pertaining to CIN stress is largely theoretical and anecdotal in nature. For example, Lanceley (1999) suggests negotiators can experience stress before, during, and after a negotiation incident, though this is based on what appears to be commonsensical, as opposed to any empirical findings. Similarly, Mount (2006) has discussed the potential for CINs to experience PTSD symptoms where they may have witnessed serious injury or death. Further, McMains and Mullins (2015) reported that police negotiators are under a great deal of stress from: talking to a person who may cause serious harm; role ambiguity due to the negotiator role being at odds with that of their general police officer role; holding the lives of other people in their hands; constant monitoring and evaluating of their performance; and basic needs being unmet as they cannot leave their position, leading to thirst, hunger, and fatigue. Post-incident stressors were suggested as media scrutiny and criticism from others. Other stressors have been identified, such as: a lack of understanding of the negotiator role from non-negotiator trained staff (McMains & Mullins, 2015; Norton & Petz, 2012); performance anxiety (Bohl, 1992); and negotiating with quiet or passive subjects/difficulty progressing dialogue (Bohl, 1992).

In a grounded theory study, Spence and Millott (2016) explored the attitudes and support needs of Scottish police officer negotiators involved in suicide prevention ($n = 16$). They found a fear of failure to resolve the incident, with the suicide attempter unharmed, was a specific stressor for several participants. This was linked to concerns of under-performing in front of colleagues and the subsequent inquiry into their performance. Despite the presence of stressors, Spence and Millott found negotiators experienced a

range of emotions, from anxiety and nervousness, through to excitement and anticipation. One participant described feeling a “real buzz” and another explained it was emotionally draining. Other participants had described the experience of stress was no more than their day job as a police officer.

A qualitative study by Grubb (2016), also using grounded theory methodology, reported the same spread of experiences from interviews with 15 police negotiators in England. Grubb reported that some negotiators do not find negotiating stressful; some explained it as “different” to their regular police officer role; some saw negotiation as a challenge as opposed to conventional stress; and others experienced positive (eustress) and negative stress. Stress described as ‘different’ related to negotiation stress being: less intense/severe; more stressful; different but equal in terms of intensity; and intense but short-lived. This variety of experiences is perhaps not surprising given the difference in individual, internal, external, and situation-specific factors, that will make every incident different. In relation to sources of stress, Grubb’s findings did not replicate those of Spence and Millott (2016). Instead, Grubb found the stressors: a lack of control at the scene; non-negotiator trained colleagues becoming directly involved in negotiations; conflict between the demands of their day job and negotiator role; and conflict with managers who need to ensure all police officer duties are covered. Some negotiators described being required to negotiate alone whilst they waited for other negotiators to arrive. This was described as being particularly stressful due to feeling isolated, and not having support to assist with communications to/from the silver commander. It is possible that the stressors identified by Spence and Millott, in relation to performance, were relevant to Grubb’s sample but that they were simply not vocalised, or not sufficiently spread across the data, to have been identified as a theme.

A US study of 13 police negotiators, conducted by Sachs (1996), reported similar stressors to those found by Grubb (2016) and Spence and Millott (2016); including, interference from colleagues and a fear of performing poorly. Other findings supported some of the anecdotal literature: stress from a known threat e.g., threat of harm; public and media scrutiny; boredom and fatigue; and frustration with suspects.

As previously noted, narrative reviews and the anecdotal literature appears to unequivocally consider that the experience of stress for negotiators is wholly negative; however, the empirical literature presents a more colourful picture that stress is experienced on a continuum from negative/harmful stress through to it being a positive experience (e.g., Grubb, 2016; Sachs, 1996).

Coping. An examination of the general coping styles of CINs is a welcome recent addition to the literature (see Grubb, Brown, & Hall, 2015; Young, 2016). An understanding of the coping strategies that negotiators adopt, specifically to deal with negotiation situations, is currently limited; however, some studies were found that identified coping strategies as part of studies with wider research aims with police negotiators. According to Lazarus and Folkman (1984), coping strategies can be seen as the cognitive and behavioural efforts an individual employs to manage, tolerate, or reduce a stressor.

Grubb (2016) found police negotiators used the behavioural coping strategies of: using the formal post-incident debrief; exercise; and drinking alcohol to manage the stress/pressure of negotiation work. Another qualitative study (Sachs, 1996), and a quantitative study by Bohl (2001), have reported the benefits of the operational debrief to talk through the incident and have ‘clear the air’ talks with team members about aspects of the incident that had annoyed or frustrated them. A particularly strong finding by Sachs

(1996), who interviewed 13 police negotiators in the US, was the importance of the debrief as a place to receive feedback and for self-reflection. Sachs reported that participants valued the cognitive strategy of self-reflection as a process for learning and development, to improve their practice. Other cognitive strategies have been identified, such as externalising responsibility onto decision-makers for negative outcomes (Sachs, 1996; Terhune-Bickler, 2005), and avoiding thinking about the negative feelings associated with the incident (Bohl, 2001). In terms of behavioural strategies, several researchers have reported the benefits of humour (Sachs, 1996; Spence & Millott, 2016; Terhune-Bickler, 2005), and using training in stress and emotional management techniques.

Support. Social support (e.g., family, friends, and co-workers) is viewed as a coping resource that people may draw upon when handling a stressful situation (Thoits, 1995). Within an occupational context, support may also be available from services provided by the organisation. A small number of studies in the negotiation literature have explored the mechanisms of support available to negotiators (e.g., Spence & Millott, 2016; Terhune-Bickler, 2005).

In a study exploring the responses of police crisis negotiators to incidents that had resulted in suicide, Terhune-Bickler (2005) found that the majority of participants had discussed the incident with their spouse, while others had confided in a close friend or a co-worker. In this study, officers involved in 12 out of 31 incidents were offered a critical incident debrief. The majority of those that attended the debrief reported that it had been helpful to process their thoughts and feelings; however, one participant reported that it had not been helpful, and another that the debrief had been offered too soon. Terhune-Bickler also reported that “few” negotiators voluntarily sought mental health services post-incident, with the majority reporting that they did not think it would be helpful. Terhune-

Bickler hypothesised that this finding could be due to perceived stigma associated with seeking support, though this had not been explored with the participants.

In their study of support needs and coping mechanisms of police negotiators, Spence and Millott (2016) reported two types of support available: psychological support for dealing with the emotional demands of the role, and practical support in terms of strategies, processes, and resources. Despite the participants being from one Scottish police service, their experiences were different in relation to the support provided and their understanding of the support services available to them. For example, some participants felt their emotional wellbeing was considered during post-incident debriefs, whereas others felt debriefs were focused on the practicalities of the incident. Most participants were aware of the occupational health service employee support programme, but they were not all aware of the services available and/or how to access services. Only one participant reported having used the counselling service, though the remaining participants reported they would use the service if they needed to or were recommended to do so by their manager. Despite a negotiator meeting being seen as the most effective way of debriefing and receiving support, several participants described a lack of opportunity to meet. Grubb (2016) also found differences in the provision of organisational support services across police forces/regions, which included: occupational health; access to medical advisors; access to internal and external counselling; and a mandatory annual health check with a mental health professional.

In terms of social support, all participants in the study by Spence and Millott (2016) reported the benefits of peer support during, and following, negotiation situations. This finding was supported by Grubb (2016). Outside of the police service, several participants used familial support; however, some reported they did not discuss this aspect of their

work with their spouse under any circumstance. Unfortunately, the reason(s) why this was the case was not reported. Similarly, Grubb found that some participants preferred to talk to their co-workers, while others preferred to access support from family members and/or friends. One participant had explained that it would depend on the situation whether they would choose to talk to a co-worker or to their spouse. Again, how those decisions were made was not reported.

Help-seeking stigma was discussed by all participants in the study by Spence and Millott (2016). Specifically, all but one participant reported there was a stigma associated with seeking support, though some reported it was less of an issue than it had been in the past. Some participants suggested the fear of stigma could be circumvented if referrals to occupational health services were mandatory. This could suggest that whilst there may be a stigma associated with *asking* for support, it is seen as acceptable to accept it when it is offered.

The Current Study

Crawley and Crawley (2007) refer to the “invisibility” of prison officer work. Certainly, the work of prison officers is under-researched when compared to other emergency public-sector workers (e.g., police, fire service, and medical personnel). Whilst prison officers share the same professional categorisation, they work in a unique environment and perform very different tasks. As such, whilst the extant literature has illuminated the field of critical incident negotiation, findings from police samples cannot be assumed to be generalisable to those who work in a prison setting.

The current study will advance existing knowledge as it is the first known study to explore the experiences of negotiators working in a prison setting. Taking forward some of

the recommendations from previous studies, a qualitative methodology will be used (Young, 2016), and the views of negotiators in relation to support mechanisms will be explored (Bohl, 1992; Spence & Millott, 2016). The aim of the current study, then, is to explore the experiences of prison officer negotiators. More specifically, the research questions being explored are:

1. What types of negotiating experiences do prison officer negotiators have?
2. What are the sources of incident-related stress for prison officer negotiators and how do they experience stress?
3. How does the prison officer negotiator cope with incident-related stress?
4. What support mechanisms are available to the prison officer negotiator and how do they view them?

Method

Methodology

Research methodology should be driven by the research aims and questions (Bryman, 2001; Willig, 2001). The current study sought to identify prison officer negotiators' operational experiences, and to understand, and explore, their experience of stress, use of coping strategies, and views towards available support mechanisms. A qualitative methodology was deemed the most appropriate as it enables the researcher to identify and understand the complexities in participant accounts, through language, which cannot be understood by quantitative methods (Shaw, Dyson, & Peel, 2008). Considering the lack of knowledge in the research area, data were collected using semi-structured interviews and analysed through inductive thematic analysis (Braun & Clarke, 2006). The

study was conducted from a realist perspective, in which the interview accounts were treated as a form of testimony of the experiences and reality of the participants (Braun & Clarke, 2006).

Participants and Recruitment

A purposive sampling strategy was used. Participants were recruited from Her Majesty's Prison and Probation Service (HMPPS) Public Sector Prisons (PSPs) in the north-west of England. Two privately run prisons in the north-west were excluded from the study as the aim was for a homogenous sample, in terms of participant experience, and processes within private prisons can differ to PSPs.

Governing governors at all 11 PSPs falling within the north-west prisons group were contacted via e-mail (see Appendix K). The e-mail introduced the research and requested permission to approach their negotiators with a view to inviting them to participate in the study. Eight governing governors responded to the e-mail granting permission and two replied explaining they currently had no trained negotiators. The prison that had not replied was subsequently moved out of the north-west prisons group and so fell out of scope.

Upon request, security departments at seven of the prisons provided the names of their trained negotiators. One prison did not respond to requests for this information. Negotiators were subsequently contacted via their HMPPS e-mail address (see Appendix L) to introduce the research; a 'Participant Information Sheet' (see Appendix M) was attached to the e-mail.

Participants were trained prison officer negotiators whom had attended at least one live negotiation incident in the 12 months prior to interview. A total of 30 negotiators were

invited to take part in this study ($n = 20$ male; $n = 10$ female). Twenty-three negotiators replied ($n = 15$ male; $n = 8$ female), three of whom did not meet the selection criteria for having not attended a live negotiation incident within the preceding 12 months. One negotiator replied declining the invitation, though no reason was given. Nineteen negotiators agreed and were eligible to take part in the study ($n = 13$ male; $n = 6$ female). Considering the sample sizes of similar qualitative studies (e.g., Grubb, 2016; Spence & Millott, 2016), and the recommendation from Braun and Clarke (2013) for a satisfactory sample size to be between 10 and 20, it had been the intention of the researcher to select 15 participants with a spread of experiences and demographic characteristics; however, difficulties in arranging interviews due to staff sickness and the inability of some to be released from their duties, 14 negotiators were self-selected. During data analysis, no new codes were identified after Participant 11, indicating that knowledge saturation had likely been achieved for this sampling frame (Guest, Bunce, & Johnson (2006).

Given the small sampling frame, the demographic data of participants is presented at aggregate level to maintain confidentiality (see Appendix N for the Demographic Information Sheet). The sample consisted of 10 male and four female participants with age ranging from 32 years to 58 years 10 months ($M = 45$ years 4 months). All participants identified themselves as White British. The length of time served as a prison officer ranged from 2 years 4 months to 29 years ($M = 14$ years 8 months) and the length of time as a negotiator ranged from 1 to 20 years ($M = 6$ years 9 months). It was not possible to report the number of negotiation incidents participants had attended due to difficulty remembering; however, the minimum number of incidents attended by a participant was six. It is important to note that whilst the participants were based in north-west prisons, at the time of interview, most had worked in prisons across England and so the experiences

discussed in this study are not all specific to north-west prisons. Other than gender, no further details are known about the non-respondents ($n = 5$ male; $n = 2$ female) or prospective participants ($n = 3$ male; $n = 2$ female).

Data Collection

The method of semi-structured interviews was chosen to collect the data as, unlike survey data, it allows for a through exploration of participant experiences (Willig, 2001). Whilst the researcher had a list of pre-planned questions, flexibility was adopted so as to be responsive to the interviewee. The interview guide was devised considering the existing literature and the research questions. The initial interview was piloted with an ex-negotiator and, following feedback, some amendments were made (Agee, 2009). The final interview guide can be found in Appendix O.

Thirteen interviews were conducted face-to-face and one interview was conducted via telephone due to time constraints. Interviews were conducted between 31st October 2017 and 25th May 2018. Face-to-face contact between the researcher and participant has been considered the “gold standard” for qualitative interviews (McCoyd & Kerson, 2006, p. 389). Data gathered via telephone interviews has been criticised for loss of contextual data (Aquilino, 1994), difficulties in developing rapport (Sweet, 2002), and difficulties probing (Carr & Worth, 2001); however, in a review of the qualitative literature using telephone interviews, Novick (2008) found no evidence that such concerns were justified. The data gathered from the telephone interview was therefore given equal weight to the data gathered face-to-face.

Establishing trust and rapport is recognised as a key component of interactive data collection (Reinharz, 1993). Reinharz and Chase (2003) report that interviewer self-

disclosure can assist with rapport building and encourage participants to be more forthcoming. Prior to each interview commencing, the researcher disclosed personal information about herself in terms of her career history as a psychologist in HMPPS (where she has worked and for how long), her role as a negotiation advisor (her experiences of this role and where she has worked), and why she was interested in the research area. The act of self-disclosure also sought to allay any concerns of a power imbalance, should there be a perception of the researcher as an expert in the negotiator role (Kvale, 1996).

The researcher had met four participants previously: two during live negotiations in the preceding six months; one during negotiator training two years prior to interview; and one during negotiator refresher training two weeks prior to interview. From the researcher's observation there did not appear to be any difference in the interactions with participants she had previously met, to those she had not.

Face-to-face interviews were conducted in quiet offices either inside or outside the participant's place of work (in government offices). The telephone interview was conducted in the participant's private office while the researcher was alone at her home. The duration of interviews ranged from 33 minutes to 83 minutes ($M = 56$ minutes). The sum total of audio data was 779 minutes. All interviews were audio-recorded. All participants were debriefed by the researcher and given a debrief sheet to take away following the interview (see Appendix P).

Ethical Considerations

Approval. HMPPS National Research Committee, and governing governors of the individual establishments, granted permission to conduct the research. Ethical approval

was granted from the Science, Technology, Engineering and Mathematics Ethical Review Committee at the University of Birmingham (Ethical Review Number: ERN_17-0935A). Ethical guidelines for research of the British Psychological Society (BPS, 2014) and the Standards of Conduct, Performance and Ethics of the Health and Care Professions Council (Health and Care Professions Council, 2016) were adhered to throughout the study.

Consent. Consent to participate in the study was fully informed. Prior to commencing the interview, participants were fully briefed about the research covering all aspects within the participant information sheet. The key points from this sheet were incorporated into a consent form (see Appendix Q). Participants had the opportunity to ask any questions of the researcher and, once satisfied, the participant and the researcher signed the consent form. No participant declined to go forward with the interview and no participant requested for their data to be subsequently withdrawn.

Confidentiality. All written and audio data pertaining to participants was saved onto the University of Birmingham's Bear DataShare secure IT system and the files password protected. Interview data were downloaded from the voice recorder into Bear DataShare the same day and immediately deleted from the voice recorder. The consent forms were stored in a locked filing cabinet in the researcher's locked office on government premises.

At the time of interview, participants were allocated a pseudonym and were referred to by this pseudonym throughout the research period and subsequent reports. During the transcription process, all person names were removed, and location names were changed to an alternative. As a further measure, the demographic characteristics of the participants are reported at aggregate level.

Data Analysis

Reflections and field notes. The researcher kept a reflexive journal documenting decisions and reflections at each stage in the research process, from formulating the interview questions to writing the research report. Immediately following each interview, reflections were noted on: the researcher's performance at gathering the data; the engagement of the participant; and emotions observed and interpreted as being present (Halcomb & Davidson, 2006). Non-verbal communication that was considered relevant to the data was also noted; for example, when participants presented a visual demonstration of an experience. Other notes included the researcher's initial thoughts on the themes running through the interview, highlighting those that were relevant to each research question (Halcomb & Davidson, 2006).

Transcription. Transcription is a fundamental component of rigour in qualitative research (Lapadat, 2000; Poland, 1995). All interviews were transcribed by the researcher in a manner appropriate for the method of data analysis (Braun & Clarke, 2013; Poland, 1995). As thematic analysis is concerned with *what* the participant said rather than *how* it was said, the full flavour of the interview need not be captured (Braun & Clarke, 2013). The interviews were therefore transcribed verbatim in a less pure form of naturalised transcription (Oliver, Serovich, & Mason, 2005). This meant transcriptions included all spoken words, laughter, long pauses, and emphasis placed on words; however, speech spoken in overlap was not indicated as such, and short pauses and involuntary vocalisations (e.g., coughs and sneezes) were not transcribed. In terms of grammar, commas were included where it was clear from listening to the conversation that omitting them could lead to misinterpreting the data. An a priori syntax code was used for consistency in transcription (see Appendix R) so that each interview was understood in the

same way (Braun & Clarke, 2013). Once transcribed, the whole transcript was re-read by the researcher whilst listening to the audio-recording as a quality check, and any errors corrected.

Method of data analysis. Thematic analysis is an approach to data analysis that searches for patterns and meaning in qualitative data (Braun & Clarke, 2013). It was chosen as the method of data analysis for this study due to the theoretical flexibility required to be able to answer all of the research questions (Braun & Clarke, 2006). Whilst thematic analysis has theoretical freedom, there are still decisions to be made regarding how the analysis will be conducted, regarding: inductive or deductive coding and analysis; taking an experiential or critical orientation to the data; and a realist or constructionist theoretical perspective (Braun & Clarke, 2012).

An inductive thematic analysis was considered the best approach for the current study as research in this area is just developing. This approach would allow the data to drive the analysis without being constrained by a pre-existing theory or framework required for a deductive approach. As the research questions were experiential and exploratory in nature, an experiential orientation was taken to the data where coding sought to identify participants' experiences and perspectives. As previously noted, the study was conducted from a realist perspective.

In terms of the approach to coding, elements of the research questions would be answered by surface level semantic codes (e.g., identification of coping strategies or type of support mechanisms) while latent level codes would allow for a more in-depth understanding of the experiences of the participants. Whilst interpretative phenomenological analysis (IPA; Smith, Flowers, & Larkin, 2009) would have been an alternative approach to answering questions exploring participants' experiences of the role,

it would not have been appropriate for identifying coping strategies or support mechanisms. Similarly, grounded theory was considered inappropriate as it was not the intention to develop theory from the data (Glaser & Strauss, 1967).

Whilst many different approaches to thematic analysis have been proposed (e.g., Aronson, 1994; Boyatzis, 1998; Joffe & Yardley, 2004), Braun and Clarke's (2006) version is the most widely cited (Clarke & Braun, 2017) and was the method of choice for this study. Their approach was chosen due to its flexibility, accessibility, and detailed systematic framework for generating codes and themes from the data (Braun & Clarke, 2006, 2012).

The transcripts were uploaded to NVivo Plus 11 which was used to code the data and store data extracts; analysis of the data was conducted manually. The six steps of Braun and Clarke's (2006, 2012) thematic analysis were followed in an iterative manner, where steps were revisited as codes were developed and refined. The six steps include: 1. Familiarising yourself with the data; 2. Generating initial codes; 3. Searching for themes; 4. Reviewing potential themes; 5. Defining and naming themes; 6. Producing the report. For transparency, details about how the steps were followed can be found in Appendix S.

Rigour. As a means of demonstrating quality, some researchers hold the view that qualitative researchers should seek inter-rater reliability, where a second reviewer independently codes the data and the level of agreement is calculated (e.g., Guest, MacQueen, & Namey, 2012); however, others argue that this is not appropriate due to the subjective nature of qualitative research (Vidich & Lyman, 1994). Braun and Clarke (2016) are of the view that such approaches undertake thematic analysis within a quantitative logic and are not in keeping with the organic, exploratory, and subjective nature of this data analysis process. Staying true to Braun and Clarke's (2006) approach to

thematic analysis, this study did not seek inter-rater reliability; however, a second psychologist reviewed the codes and themes to see if they made logical sense and could answer the research questions. A discussion was held about one theme that seemed disjointed. The data extracts were subsequently reviewed, the codes refined, and the themes (sub and overarching) relabelled accordingly to form a more coherent account of the findings.

Methodological rigour in this study was addressed through: having an appropriate methodology for addressing the research questions (Carter & Little, 2007); producing high quality transcripts (Poland, 1995); thorough data collection (Yardley, 2000); keeping a reflective journal throughout the research period (Finlay & Gough, 2003); adhering to the data analysis steps published by Braun and Clarke (2006, 2012); and providing a transparent account of the data analysis process (see Appendix S) (Guest et al., 2012). Owing to the timeframe for this project it was not possible to conduct a member/credibility check of the transcripts or research paper (Lincoln & Guba, 1985). Please see Appendix T for a reflexivity statement.

Results

In keeping with the realist methodology, a descriptive form of thematic analysis was undertaken (Braun & Clarke, 2013). The results are presented with an analytic narrative to “tell the story of the data” (Braun & Clarke, 2013, p. 252). Data extracts are used as illustrative examples of the analysis. Five overarching themes were identified to answer the research questions: ‘*Characteristics of Incidents*’ (see Figure 3, p. 103); ‘*Stressors*’ (see Figure 4, p. 108); ‘*Experience of Stress*’ (see Figure 5, p. 119); ‘*Coping Strategies*’ (see Figure 6, p. 126); and ‘*Support Mechanisms*’ (see Figure 7, p. 136). Each

theme consists of sub-themes which demonstrate the different facets of the overarching theme (see Appendix U for a thematic map).

Theme 1: Characteristics of Incidents

All participants spoke about the different types of incidents they have attended.

Commonalities were identified across the data in relation to the type of incident and to how participants perceived the function of the perpetrator's behaviour.

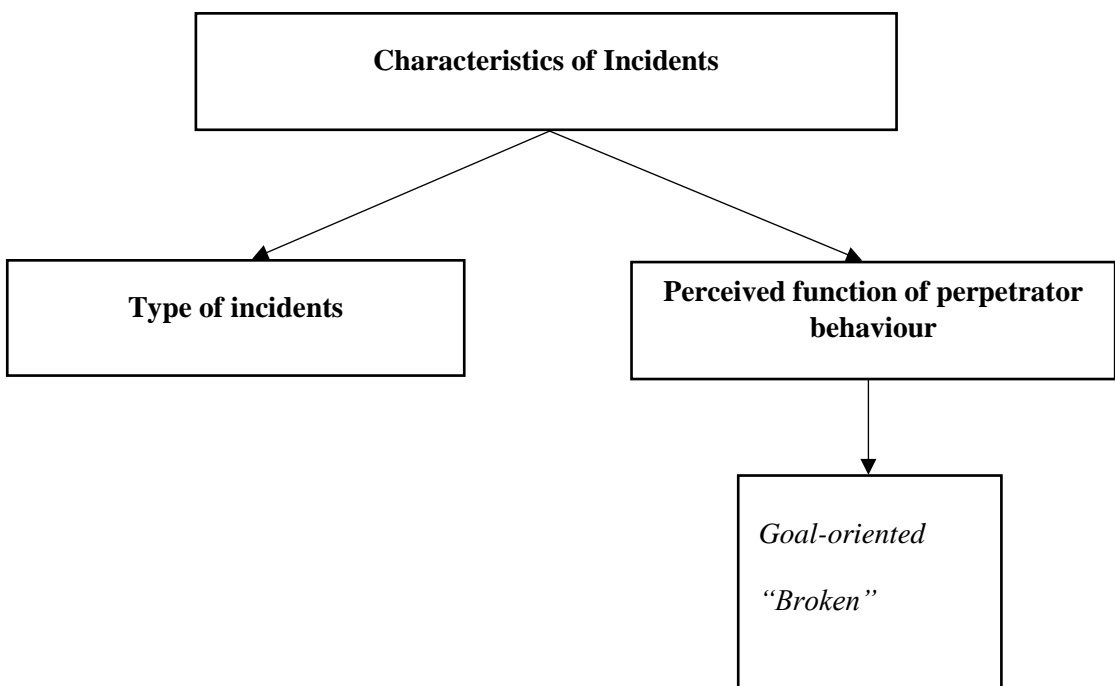


Figure 3. Thematic hierarchy of the characteristics of incidents

Type of incidents. Participants described the type of incidents they had attended. All participants had attended more than one type of incident, indicating the variety of situations they face:

“I’ve had a hostage situation, but it was a collusion hostage... self-hostages where they’ve ligatured with threats, I’ve had basic barricades... a lot of rooftop protests, some of those were self-hostage rooftop protests, protests as well, and I’ve had multiple perp situations where we’ve had wings that have barricaded up” - [Jane]

“I’ve done everything from guys in crisis self-harming, guys taking themselves hostage... I’ve done real hostage situations, fake hostage situations, riot, I think I’ve done virtually everything.” - [Adam]

Perceived function of perpetrator behaviour. Participants spoke about the reasons why prisoners engage in these extreme behaviours. There was much talk about the behaviour often being a conscious decision taken in order to draw attention to, or meet, their needs. In sharp contrast, some behaviours were understood as being triggered by a deterioration in mental health and feelings of despair.

Goal-oriented. All participants considered that by far the most common reason for a prisoner engaging in these extreme behaviours was that they wanted an immediate resolution to a particular problem. It was considered that perpetrators were using the incident to communicate a need that they did not know how to meet or were unwilling to wait to have their need met. For the most part, this was to effect change in their living

situation by seeking a move to a different location in the prison, or a move to another prison:

“In a lot of cases when you say to them, ‘Have you put an app in?’ and they’ll say, “No”. They’ll say they want a transfer, but they’ve not done anything about it” – [Fred]

“and within five ten minutes he just wanted a move onto my wing which if he’d spoke to me I could’ve organised, so I just said, ‘I can move you on that wing why didn’t you just ask me?’ ... ‘Nobody’s listening to me! I’m making a statement!’ – [Victoria]

It was considered by all participants that these prisoners were manipulating staff and the system in order to get what they want as quickly as possible. This caused several staff to feel frustrated:

“you want to say to them, “Stop being an idiot and get off the netting and we both know why you’re here, so why don’t you save us all some time and we’ll go and get this done”, and whether that’s going back to their cell or going to the CSU, but yeah, that’s becoming more of a problem for me” – [Peter]

“generally, nine times out of ten, he wants to go down the block, he’s told you why, he’s told you how he got up, how he plans to get down, what he’s going to do, how he’s going to do it, so you think ((sighs))” – [Kevin]

It was noticed that not all incidents were motivated by demands or requests. The goal of these behaviours seemed to be as a way to alleviate boredom, or seeking stimulation/excitement: “*let’s climb on some internal wall and throw some bits of pizza at people’... They’re not in it for anything in particular*” – [Daniel]. Some perpetrators seemed to be taking control of their situation; for example, wanting more time outside during warmer weather: “*they get up on a roof to sunbathe... but soon as they see the nationals turn up they want to come down*” – [Jane].

“Broken”. Many participants spoke about the self-harming behaviours they encounter. When doing so, they tended to speak at a slower, more considered pace, and used more emotive language, suggesting there was an emotional impact on them. It seemed they viewed these prisoners as genuinely in need of help, and perhaps more deserving of their time:

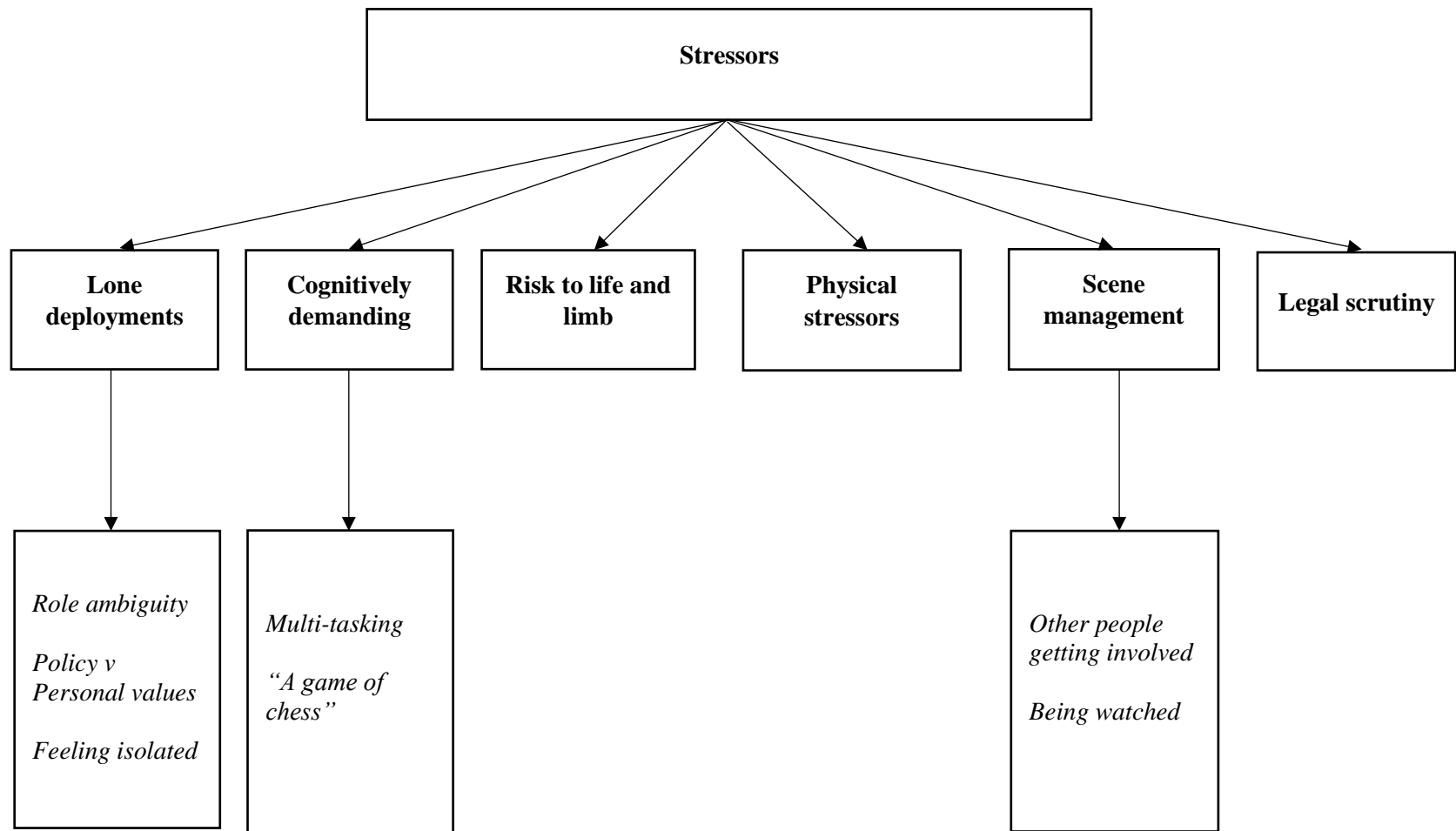
“both of those self-hostage incidents, the lad hacking at his neck with a bit of sink and one with a razor blade, they were broken, they’d lost it, they weren’t there for any particular reason, they didn’t want this that or the other... and I could tell just by looking in their eyes they weren’t playing me, they were broken, they meant it” – [Andrew]

“He’s in crisis aren’t they, people have a stigma that, ‘Oh he’s only scratched his arm, he can’t be that bad’, but to do it, whether you’ve scratched it or absolutely nailed yourself you’re in some sort’ve crisis. ... they’re the worst ones because I don’t wanna see someone in such distress” – [Kevin]

Theme 2: Stressors

Most participants denied the role was stressful though several factors were identified where it was clear they contributed to increased pressure; these were described as making the job “*more difficult*” and causing “*frustration*”, as opposed to being stressful. Six sub-themes were identified: ‘*Lone deployments*’; ‘*Cognitively demanding*’; ‘*Risk to life and limb*’; ‘*Physical stressors*’; ‘*Scene management*’; and ‘*Legal scrutiny*’.

Figure 4. Thematic hierarchy of stressors



Lone deployments. This was a strong theme throughout the data. Negotiators work in a team of three, or two as a minimum; however, participants frequently spoke of attending incidents on their own. There seemed to be three reasons why this might occur: 1) there were no other negotiators available; 2) the incident was deemed as not requiring the deployment of a negotiator team; or 3) it was in an effort to resolve a situation in a more timely manner to opening the command suite and deploying a negotiator team. Three sub-themes were identified: *'Role ambiguity'*; *'Policy v Personal values'*; and *'Feeling isolated'*.

Role ambiguity. Most participants reported that, on occasions, trained negotiators are specifically requested by managers to attend an incident in a lone capacity. These deployments appear to cause role ambiguity for participants due to lack of clarity in whether they are being sent to act as a negotiator, or as a prison officer who has had specialist training in negotiation techniques. Those perceiving lone deployments as a negotiation situation experienced pressure to fulfil a role they are not equipped to deal with, either due to an absence of resources, or systems. Consequently, feelings of frustration at a perception of being misused can occur: *"there's one negotiator... you just do it don't you, it is hard... but shouldn't be doing that"* – [Andrew]. Other participants were clear they were deployed as a prisoner officer with specialist training. These participants had a more positive perception of the situation: *"we go as a talented prison officer rather than as a negotiator and just do the best we can"* – [Syd]. Role ambiguity is perpetuated by mixed messages in how they are deployed: *"'Oh just go over there, it's not a negotiation but you're a negotiator, see what you can do'"* – [Adam]. Participants also described lack of understanding amongst non-negotiator trained colleagues about what the

role is, and what it is not. It would seem that this can lead to erroneous expectations being placed on negotiators, resulting in risk to the safety of prisoners and staff:

“I was once on Y Wing at [name of establishment] talking to a lad who’d took another lad hostage and I was there on my own for hours... and I’m thinking ‘I can’t walk away from this door’... I was thinking ‘Please god somebody walk up these stairs in a minute’ you know, and when I asked why [no one had helped] they said, ‘Oh we leave negotiators to it, they’re in charge’, they yes, me no ((laughs))”
 – [Kevin]

Policy v Personal values. Many participants described an internal conflict they experience when asked to attend an incident as a lone negotiator. On the one hand it was considered non-compliant with policy and, thus, the wrong thing to do, and on the other that it was morally the right thing to do to support colleagues, prisoners, and management:

“sometimes, particularly on a weekend, there’ll be someone gone over the railings or up on the roof or something and they’re gonna send one person, and I know we shouldn’t do it but we’re trying to get everyone home aren’t we” – [Syd]

“and they’ll say to you, ‘Such a body’s self-harmed behind his door can you go and have a word with him?’, ‘Am I a negotiator?’, ‘Well we’ve not opened the command suite’, but I can’t, I just can’t, it’s not in me to say, ‘Well no then’ you know, ‘the wing’ll deal with that’ - that lad’s behind his door, he’s severely cut his

arm... I probably am the best person to go and talk to him but officially I shouldn't because I'm not a negotiator at that point, but I do, I go." – [Kevin]

Feeling isolated. It was clear that lone working came with increased emotional and cognitive challenges; most participants described negative feelings like “*exposed*” and “*isolated*”. This appeared to be caused by feeling the full weight of the responsibility for the situation and a lack of support in dealing with the practical, cognitive, and emotional challenges of the role:

“[the incident] just stuck in my mind because I felt very isolated, you know, I had to do everything” – [Daniel]

“I don't like the fact that when you are on a roof and in a cherry picker, you're on your own, I hate that. Who's giving me support there? Who's giving me an alternative? That's the stressful bit” – [Kevin]

Cognitively demanding. All participants indirectly spoke of the cognitive demands of the negotiator role. Whilst these demands were identified as challenging and tiring, and therefore identified as a stressor, it is interesting to note that participants viewed the demands in a largely positive way - as a personal challenge to be relished. Two sub-themes were identified.

Multi-tasking. Many participants described having to undertake multiple tasks at the same time involving physical and cognitive efforts. The story of attempting to enter

and maintain a dialogue with a non-compliant prisoner, passing back and receiving information, whilst also continuously assessing and responding to risk towards themselves and others, was common. Multi-tasking in a cognitive sense included: processing and storing information; problem-solving; decision-making; and flexibility of thought in being able to initiate and progress dialogue:

“your mouth’s doing one thing talking to them but your brain’s somewhere else thinking ‘right, this this this, where do we go next... [you] analyse what they’re telling you and then you’ve got to move information backwards and receive information coming forwards, so you could be talking a complete load of tripe and all the time your brain’s going and analysing the next step” – [Daniel]

“as the [number] two, you’ve got to listen to what number three’s telling you with feedback from Silver and you’ve got to listen to everything that’s going on with the number one and the prisoner, try and get everything down, you’ve got to work out what needs to go back urgently, yeah” – [Jane]

“A game of chess”. Several participants embraced the cognitive challenge as a mental game and an opportunity to test their mental agility. They spoke of internally forward planning the conversation and needing to be several steps ahead, so they were ready for the next ‘move’. Some participants positively exuded enthusiasm when talking about how the challenge makes them feel, with some commenting that it is what keeps them in their job as a prison officer: *“I always say, if I wasn’t a negotiator I don’t think I’d*

still be in this job because I love being a negotiator” – [Elizabeth]. Excerpts illustrating the concept of negotiation as a captivating mental activity follow:

“It’s a bit of a game really isn’t it, it’s like a, you know, a really heavy game, where you’re thinking, and the strategies going through your head, it’s really interesting and I think that’s what draws you to the job” [Syd]

“each shout is completely individual, some are a bit like a mental game of chess, erm, taking someone on on a brain level... twisting things round, negatives into positives... I like the challenge it gives me, I would be just a full-time negotiator if I could” – [Andrew]

Risk to life and limb. All participants described attending at least one incident where there had been a risk of serious harm being caused to another person. For some incidents the risk of harm would most likely have been caused by an accident, usually by the perpetrator falling from height while, in other incidents, actual threats of harm towards a person were being made. Threats of harm were made by the perpetrator(s) towards themselves or towards another person. The majority of participants had witnessed actual physical harm being caused to another person; some were self-inflicted injuries, and others were directed towards a hostage. Most participants described feelings of helplessness during these times:

“but then the perp started physically harming his hostage and started cutting him pretty bad erm... it wasn’t easy you know, it’s not nice watching someone being cut in front of you” – [Daniel]

“and he’s hanging there and I couldn’t do it, I couldn’t get in... and I’m thinking ‘Oh shit... I can’t physically get in there’... we couldn’t get in” – [Kevin]

Physical stressors. The majority of participants described factors pertaining to their physical comfort during negotiations, including: factors relating to nourishment; weather conditions; and requiring a comfort break. Some participants felt their physical care needs were considered and attended to whereas others had the opposite experience. How well their needs were met seemed to correlate with how valued participants felt:

“I think our silver commanders are really good... they always make sure that we’re fed and watered which is, you know, a god send sometimes, especially when you’re negotiating through your lunch period” – [Charlie]

“it’s almost like no one cares of what we’ve been through... sometimes, I do think that... I was five hours on the door... standing on the door, gasping for a drink and all... so sometimes you think like that, no one really cares about what’s happening on the door” - [David]

Scene management. Most participants spoke about their job being made more difficult by circumstances occurring at the scene. This theme centred around issues relating to untrained staff becoming involved.

Other people getting involved. Most participants had experienced a non-negotiator trained colleague becoming directly involved in an incident by talking to the perpetrator(s). This was described as being one of the most frustrating aspects of the role, particularly as it can undo the gains made in bringing the incident towards a peaceful resolution. It was considered by participants that this problem was due to a genuine lack of understanding of the management of such incidents by non-trained colleagues, as opposed to any malintent:

“we have had a couple of incidences of governors turning up... and absolutely taking all of the momentum out of something because they think they’re there to solve a problem and they turn up, erm, say, “No, bugger off” and you’re absolutely knackered again aren’t you?... I mean they’re trying to expediate things, but they don’t have any idea of the background as to how the process works” – [Peter]

“and then other people that just kept getting involved and I was, ‘Just go away’, they don’t understand that when there’s an incident going on them saying, ‘Oh I know him, I’ll go and have a chat’, can completely mess up the dynamic and everything” – [Jane]

Being watched. Some participants discussed feeling under pressure and distracted when they were being observed by colleagues or prisoners *“rubber-necking”* – [Ann]. For

some the pressure was related to an internalised fear that colleagues would negatively critique their performance; unjust criticism and embarrassment were particularly common features across the data:

“if they [perpetrators] walk down the landing and are speaking to other people you’re kind of thinking... the four staff on the corners of the netting, might be thinking, ‘Well what are the negotiators- what’s the point of the negotiators if they’re just gonna let them go here, there, and everywhere’” - [David]

“the risk of embarrassment more than anything and the kind of thought that if you don’t get anywhere that it kind of reflects negatively on yourself, on your ability” – [Charlie]

Some participants felt an external pressure to resolve an incident due to its impact on the people directly involved, the running of the regime, and particularly on their colleagues:

“you’re in that situation and you know that that person up there’s relying on you [the perpetrator], Silver’s relying on you, erm, and everyone’s around watching what you’re doing” – [Jane]

“my concern is to resolve it... those staff aren’t going home, and you’re well aware of it... you can glance to your side and you can see all the officers sat in the office waiting to go home – [Victoria]

Legal scrutiny. Less than half the participants discussed issues relating to fears over legal comeback in the event of a negative outcome; however, for those that did, significant concern was expressed. As the negotiator team are in direct contact with the perpetrator, they felt especially vulnerable to ‘finger pointing’:

“If he ends up cutting his jugular and he dies in front of me then it’ll be stressful but it won’t be my fault, but also a part of you is thinking someone will come looking to try and see if it is your fault, someone’ll be looking for a scapegoat type of thing” – [David]

“you’re really hoping that the right words’ll come to you, and if they don’t, you know, if they don’t, you start thinking, ‘Coroner’s Court’, because... if you’re the last person to speak to them... what’s his barrister gonna say? So where does that put me legally?” – [Syd]

Several participants commented that an absence of formal paperwork required from negotiators following the resolution of an incident was “bizarre” and “weird”. A small number of participants chose to keep their own records. The level of detail recorded differed across participants and ranged from the date, time, and type of incident, to including content of dialogue and mood of the perpetrator(s). The consequences of not keeping a record were potentially serious:

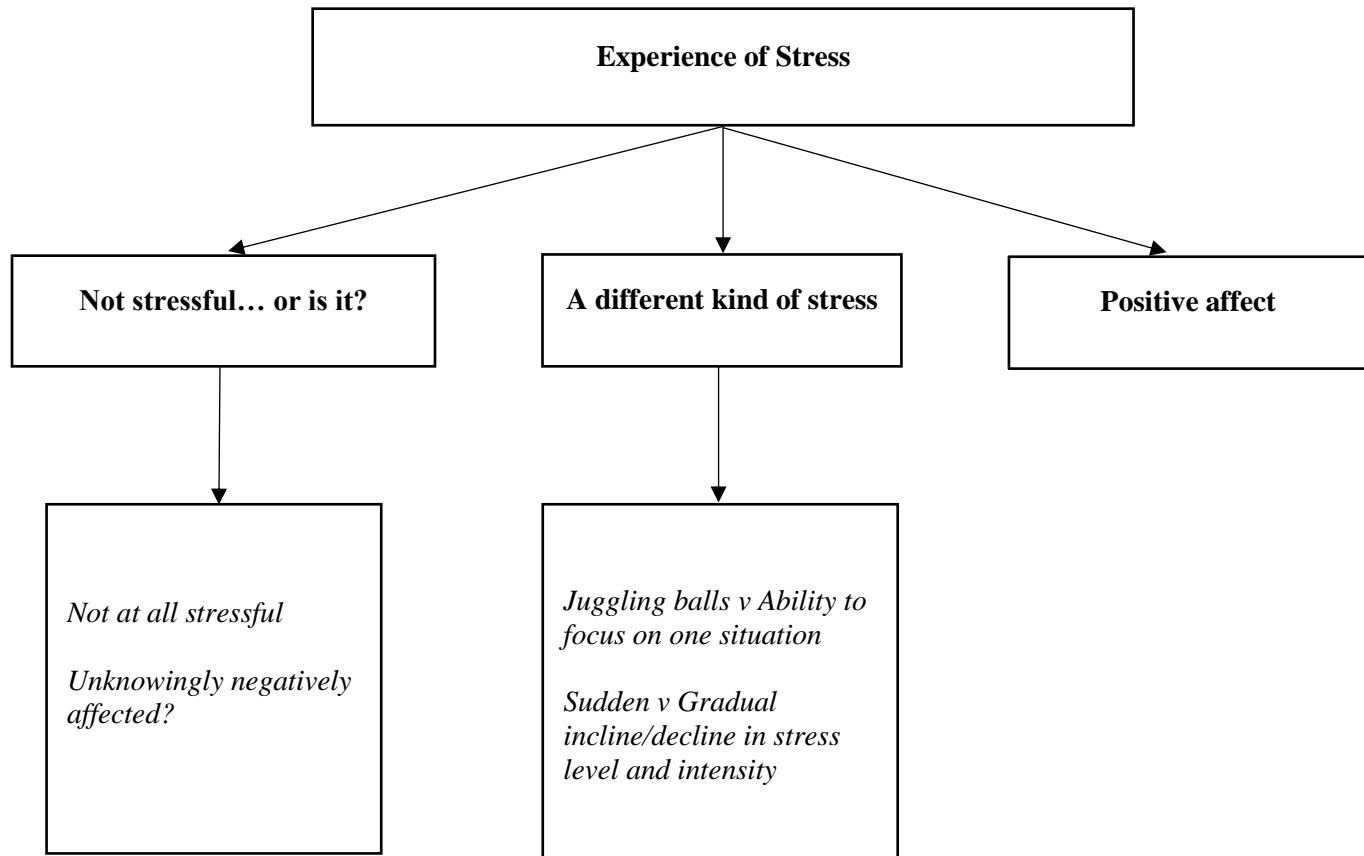
“I remember thinking, ‘I’m going to be interviewed by the police and I’ve forgotten everything. I remember that in the immediate days thinking, ‘Oh shit I’ve forgotten

everything, what was it, who was it, where was it, who was there', and I remember that, I was dreading the police interview" – [Jack]

Theme 3: Experience of Stress

This theme relates to how participants experience the stressors of the negotiator role. Three sub-themes were identified that encapsulate the flavour of how participants perceive their experiences and the emotional impact.

Figure 5. Thematic hierarchy of the experience of stress



Not stressful... or is it? Most participants denied that the role was stressful in a negative sense although some of those participants went on to describe an emotionally difficult event that had left a lasting impression in their memory. Those images were described as just ‘being there’ and did not cause them any distress. Some participants went on to question whether some of their experiences had indeed been stressful but that perhaps they were not (yet) aware of it.

Not at all stressful. Most participants reported the role was not stressful and was seen by many as just another job to do in their day:

“I tend to be, go in, I’ve got a job to do, and I get the job done ... I don’t find it stressful you know” – [Andrew]

“I’ve never felt stressed at an incident, you know I’ve obviously felt the pressure to kind of maintain peoples’ safety but [not] in terms of stress” – [Charlie]

Some participants, however, described detailed visual images of incidents they had attended several months or years prior. Whilst one could interpret these as a symptom of post-traumatic stress disorder, the participants reported that they were not distressed by those images, and they did not cause them difficulties in continuing to perform the role or in their life generally:

“I’d say that was the worst one out of all of them and erm, that one, I can still to this day see... visions of it in my head, I can visually picture it... it’s clear as day, it’s in my head... but no it doesn’t bother me” – [Elizabeth]

Unknowingly negatively affected? For many participants it seemed that discussing their experiences brought the potential negative effects of what they have experienced to the fore. One participant became visibly upset during the interview when re-counting a particularly distressing incident. This came as a surprise to the participant as they were unaware the experience was still ‘with them’. Several participants reflected on their experiences and wondered whether there might be a “*drip, drip*” – [David] effect in that negative stress might be building up but they were unaware of how it might be impacting on them:

“you don’t know if there’s gonna be any effects of what you’re experiencing... it could be one little thing, one point tips you over the edge and it’s not that one little thing, it’s all the things that have gone before... I’ve never felt [stressed] ... but you don’t know the effect it’s having... because you don’t think about it a lot you don’t know if it’s having any impact” – [David]

A different kind of stress. Many participants described negotiating as a different kind of stress, or pressure, to their regular job. The themes across the data were in relation to having a greater number of problems to deal with simultaneously in their general role and also how a stress response can be triggered more quickly, and experienced more intensely, in their general role.

Juggling balls v Ability to focus on one situation. Most participants explained that the main difference in their role as a negotiator was that you only have one problem to deal with, and often just one prisoner. Many participants described a different kind of multi-tasking in their regular role which involved dealing with many people and many problems at the same time, or in quick succession. In addition to managing many prisoners with different problems/requests at the same time, they are also required to answer cell bells, deal with telephone queries, and assist non-operational visitors on the wing who need their assistance. In some respects, this made the negotiator role less stressful for some participants:

“the negotiator stresses are focused in one point aren’t they whereas on the wing you could deal with ten incidents in ten minutes whether that be someone off their head on NPS, someone who’s feeling suicidal, you just get a whole rainbow of emotions on there and incidents... then someone comes with another problem, you think, ‘No... go away, go and ask somebody else’, whereas with negotiating it’s, it’s focused to a specific problem that you’re trying to solve” – [Daniel]

“I think the day to day stuff is that you’re juggling several things all at once and they’re all very serious, you know. With being a negotiator, you’ve got one thing in front of you, you block everything out and you deal with the thing in front of you, that’s quite easy” – [Jack]

Sudden v Gradual incline/decline in stress level and intensity. Some participants explained the differences in relation to the speed of the physiological stress response

between negotiation and general incidents. An alarm bell, or a sudden and unexpected event on the wing, would lead to a surge of adrenalin while the stress response to being called to a negotiation incident was more gradual, would fluctuate, and was generally less intense. Further, it was suggested that it was easier to return to baseline level of stress following a negotiation: *“the stress levels are probably the same but with an incident you can come down after it”* – [Kevin]. The less intense experience of stress during negotiation could be explained by a greater feeling of safety for themselves and others not directly involved in the incident.

“I suppose, as a negotiator, they [stress levels] don’t suddenly rocket up there [raises hand high]. You might get the call to go somewhere and they might go, ‘Ooo what’s this situation gonna be?’ [raises hand to indicate slightly raised stress level] and then, depending on how it’s going... it could be a gradual thing up or a gradual thing down... if a general alarm goes now your stress levels are gonna have a quicker jump ... a prisoner getting angry right in your face... that twenty second period where we were wrestling with that prisoner, or he got really angry, your stress levels have spiked there and they might stay high for the rest of the day, higher than they could be for a five hour negotiation, because during that five hour negotiation you’re thinking, ‘I’m safe here, my colleagues are safe and the only person who’s potentially not safe is the person who’s doing something to themselves’” – [David]

“negotiation situations tend to be more steady, they [stress levels] might go up and down but it’s not like a massive [raises hand in sharp trajectory towards the

ceiling], most of the time anyway... when you're on the wing and an alarm bell goes you have to respond... it's quick... you don't know what you're gonna be faced with... it could be a prisoner or it could be one of your colleagues that's in trouble, that's more stressful... your adrenalin just kicks in cause you're not expecting it" – [Peter]

Positive affect. Some participants described positive feelings and emotions associated with negotiating which seemed to energise and inspire them. This could be explained by an incident breaking up the monotony of the day, thereby providing excitement and enthusiasm for the task: *"it gets you off the wing... it's a change" – [Charlie]*. It was also described as an experience that cannot be experienced elsewhere. This suggests a perception of the role as being unique, perhaps making it more appealing and exciting.

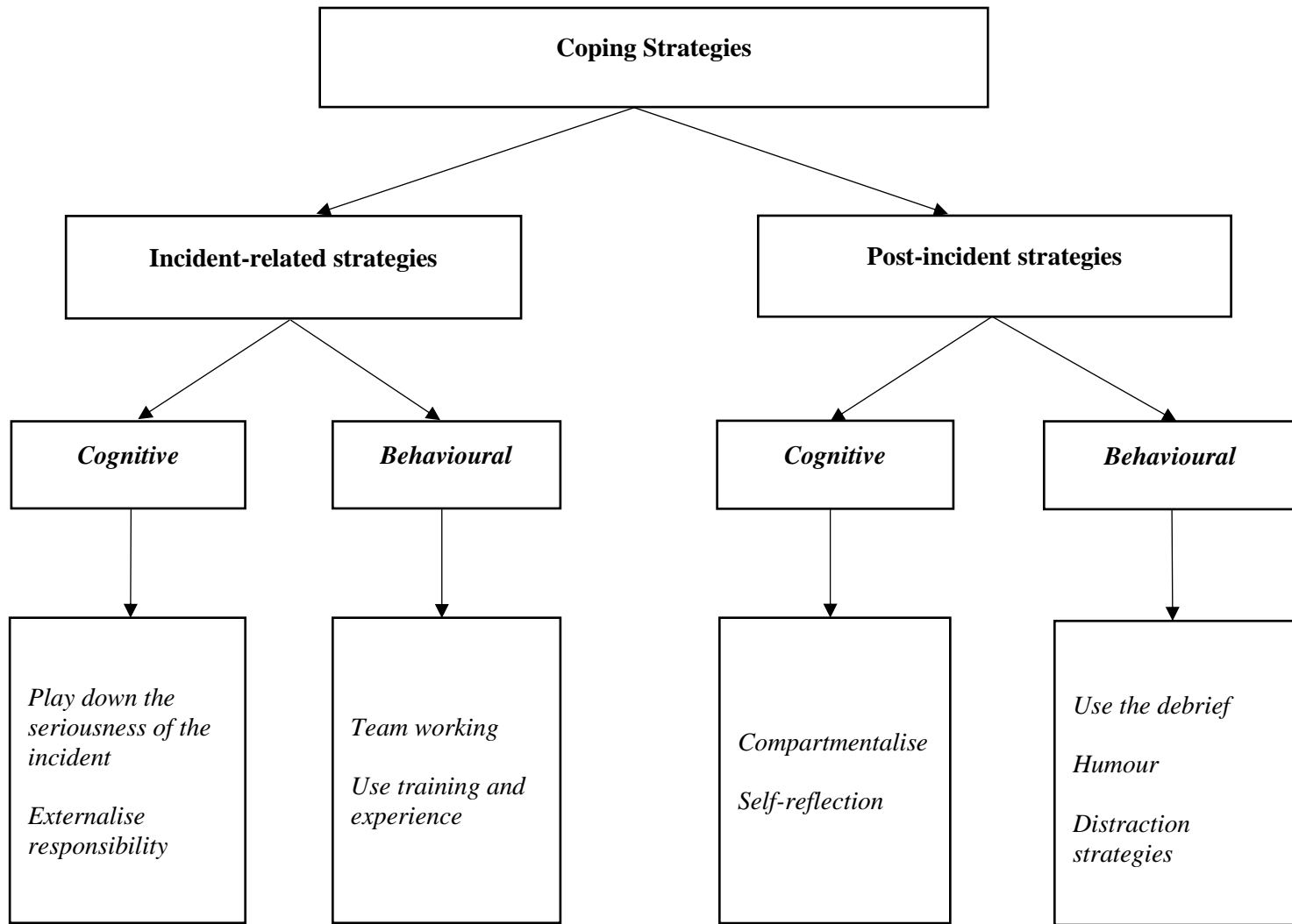
"it just fires you up... it's that sort of er anticipation, apprehension, excitement and er and it just gets me pumped... it's just different... it's really exciting" – [Syd]

"Real shouts are, 'Right let's get to it, let's crack on' [rubs hands together] it's kind of a buzz... there's nothing else like it, I've never known anything like it, where else are you gonna get to do something like that?" – [Andrew]

Theme 4: Coping Strategies

This theme encompasses the coping strategies that participants employ whilst in the process of negotiating and also after the incident has been resolved. All participants talked of using both cognitive and behavioural strategies during and after an incident.

Figure 6. Thematic hierarchy of coping strategies



Incident-related strategies. Most participants found it difficult to describe how they managed to stay calm and focused when negotiating. It would appear they were concentrating so hard on actually doing the job they were unaware of any conscious strategies they were using: *“I don’t know [how I keep calm] at the time... you just get into autopilot”* – [Elizabeth]. Some strategies were, however, identified amongst the narratives.

Cognitive. Cognitive strategies were identified as thoughts the participants told themselves which seemed to serve the function of keeping them calm and focused on the task.

Play down the seriousness of the incident. Half of the participants described thoughts that could be understood as playing down the seriousness of the situation. Whilst some participants may not have been aware of it, playing down the potential risk of harm in the situation, seemed to assist in enabling them to focus on negotiating:

“The hostage situation staff wise was a bit hairy but at no point did I think that the member of staff was in any real danger, they were in danger, don’t get me wrong”
– [Andrew]

“It didn’t affect me emotionally, like I said I was quite certain that they were in it together, I used that as a coping mechanism anyway to get through it” – [Jack]

Externalise responsibility. Several participants spoke in terms of responsibility taking for the incident and events that occur within it. These participants were clear that

they acted on the silver commander's instruction and, as such, the silver commander is responsible for the situation and its outcome. Some participants expressed that the perpetrator must take responsibility for their actions:

“once I'm negotiating I'm just the mouth piece of Silver, I'm not responsible. In a weird way I become irresponsible for what's going on” – [Adam]

“he'd cut himself and you could see blood coming down his hand... but I'm still thinking he's made that decision to do that” – [David]

Behavioural. All participants spoke of behaviours they use during the course of an incident that can be understood as helping them deal with the situation. Two themes were identified amongst the data: team working and using their training and experience.

Team-working. All participants spoke of the importance of providing support to, and/or receiving support from, their fellow negotiators. Working in a team was a strong theme across the data as something that helps participants get through incidents with the least amount of stress. This finding supports the ‘Stressor’ sub-theme of ‘Feeling isolated’ and the feeling of pressure experienced when working in isolation:

“I know how frustrating it is when the command suite say, ‘No information’, so I will go back and say, ‘They’ve no information, however, try this...’ to keep the number one’s spirits up” – [Kevin]

“it’s a bit like an actor on a stage delivering a bit of a performance and at some point you are gonna forget a line or two and that’s where your Two comes in and goes, “Here you are, try this”, so I think it’s really important people are aware and help you out and support you” – [Fred]

Use training and experience. Half of the participants specifically identified their training and/or past experiences as a negotiator as giving them the confidence to perform the role. The essence here was that the more incidents you are involved in, the more competent and confident you get:

“Erm, I don’t particularly get apprehensive about them erm I feel quite suitably trained you know... for us, because it’s fairly regular, we kind of, you know, we work well together, and I think that offers you a lot of support and a lot of comfort” – [Charlie]

“Here I’m very comfortable because we’ve had so many incidents over the last few years, we’re very good actually at dealing with them” – [Kevin]

Post-incident strategies. Participants seemed to be able to identify coping strategies they use after an incident more readily than during an incident. This would appear to be due to the cognitive demands of the situation having been relieved and other thoughts are allowed to enter their minds. Both cognitive and behavioural coping strategies were identified in the narratives and those described most frequently across the data were identified into themes.

Cognitive. All participants described using at least one cognitive strategy to help process their thoughts and feelings following an incident.

Compartmentalise. Just less than half of participants described a conscious process of pushing the negative thoughts, emotions, and images associated with difficult experiences to the back of their minds. Participants described putting thoughts into boxes while some specifically described their efforts as compartmentalising. Whilst all participants considered it to be an effective strategy for them, some participants reflected that it might not be a healthy strategy to use long term:

“with stressful incidents, I can, I think I’m very good at just putting things into boxes and putting them away... and that’s where they’ll sit” – [Daniel]

“I compartmentalise... you know, you can only have a certain amount of those [observing serious self-harm] before you start learning that there’s pieces of your brain that you just don’t visit... but after that one I cried, that’s when the process of compartmentalising started building up inside me” – [Adam]

Self-reflection. All participants described reflecting on how the more serious incidents had evolved and been managed. It was clear that their performance was important to them with all participants speaking of identifying ways they could improve. For the most part, participants seemed to have balance in their reflections by thinking about what had gone well, as well as things that had not gone so well; however, there seemed to be greater emphasis on how they could have performed better:

“I’ll analyse what I’ve done well and what I should’ve done, if I should’ve done anything different and what I could’ve done different... you self-analyse” – [Daniel]

“I’m probably very overly self-critical and analyse, over-analyse things anyway... I always debrief from everything... so yeah I always think about it cause it’s all about self-improvement isn’t it” – [David]

Behavioural. This theme explains the activities that the participants described undertaking as part of their routine of ‘coming down’ after an incident.

Use the debrief. The debrief was a key coping mechanism for all participants. It was described as a place to process their thoughts, and to give and receive feedback. This was related to the importance placed on personal growth and development in the role. Some participants also valued the debrief as an opportunity to openly discuss frustrations if something had been unhelpful to the negotiation process:

“Talking to the NA is good, if you get sort of a chance to discuss things with... they can give you some feedback, that’s always helpful. Feedback from your colleagues... always helps” – [Daniel]

“the debrief you obviously get to have your say so that helps to get a few things off your chest, if you think something’s been done well or something’s not been done well” – [Victoria]

In addition to the full debrief, some participants described being debriefed as a negotiator team by the silver commander; however, this was not consistent practice across establishments. Those that did have a negotiator only debrief found this very beneficial and valued that opportunity:

“our governor’s very good at ensuring we always have a debrief afterwards separate to everyone else, so we always have that... it gives you time too to evaluate what’s happened and recuperate and stuff... and that helps.” – [Jack]

“hopefully whoever’s been silver will debrief you, because you can say things there... that you might not want to say at the debrief” – [Syd]

There was concern and discontent from most participants that a debrief was not provided after lone deployments. This is an important finding as lone deployments were often the most difficult incidents in that they tended to be those dealing with someone who was actively self-harming:

“They’re the worst ones because I don’t wanna see somebody in such distress. I deal with it very well, but when it comes to, if it was an incident, a proper incident, there’d be a debrief” - [Jane]

“if the lad’s self, seriously self-harmed, he’s he’s barricade his door and he’s self-harming and I can see him and I’ve convinced him that you know, to take the barricade down... it’s not really an incident. It didn’t happen as an incident so I’ll

walk away and go wherever I'm going and that's it, but they pile up, you know" –
[Kevin]

Another important finding was that on occasions where incidents had been resolved late, the debrief was often held the following day to allow staff to go home. This meant that some participants did not have a debrief if they were not on shift the following day:

"it finished about half eleven at night... and it was a case of everyone just wanted to wrap up and go home and that's what they did. I think I was a rest day the next day anyway so... came back to work... and everyone had forgotten about it by then ((laughs))" - [Daniel]

Humour. Many participants spoke about the use of humour specifically as a coping strategy. Good natured humour, described as "*banter*", seemed to serve as a way to bond with negotiator and non-negotiator colleagues. There was an unspoken acknowledgement that being included in banter meant you were accepted as part of the team:

"and you've got the gallows humour, especially in this job, like, where you just make jokes about things. New, new members coming on to the team we get to know them and we take the mickey out of them and you bond that way don't you and that's the way it works and I think we're all happy with that" – [Daniel]

"there's loads [banter] I think that's what gets you through I think, that's one of the main reasons to stay in the job I think, that you all work together... there's

always somebody who'll cheer you up or have a laugh about things so that's one of the main things about this job" – [Ann]

Distraction strategies. Distraction strategies were behaviours that helped participants unwind after an incident. After the more difficult and tense incidents, many participants described feeling heightened arousal in terms of their thoughts, emotions, and physiological state for some time afterwards. Many participants described finding it hard to go to sleep for one or two nights following the more difficult incidents and engaging in some kind of activity helped them to relax. Participants described engaging in activities such as: going out for a walk; doing household chores; watching television; listening to radio talk shows; and reading a book as strategies to take their mind away from the situation:

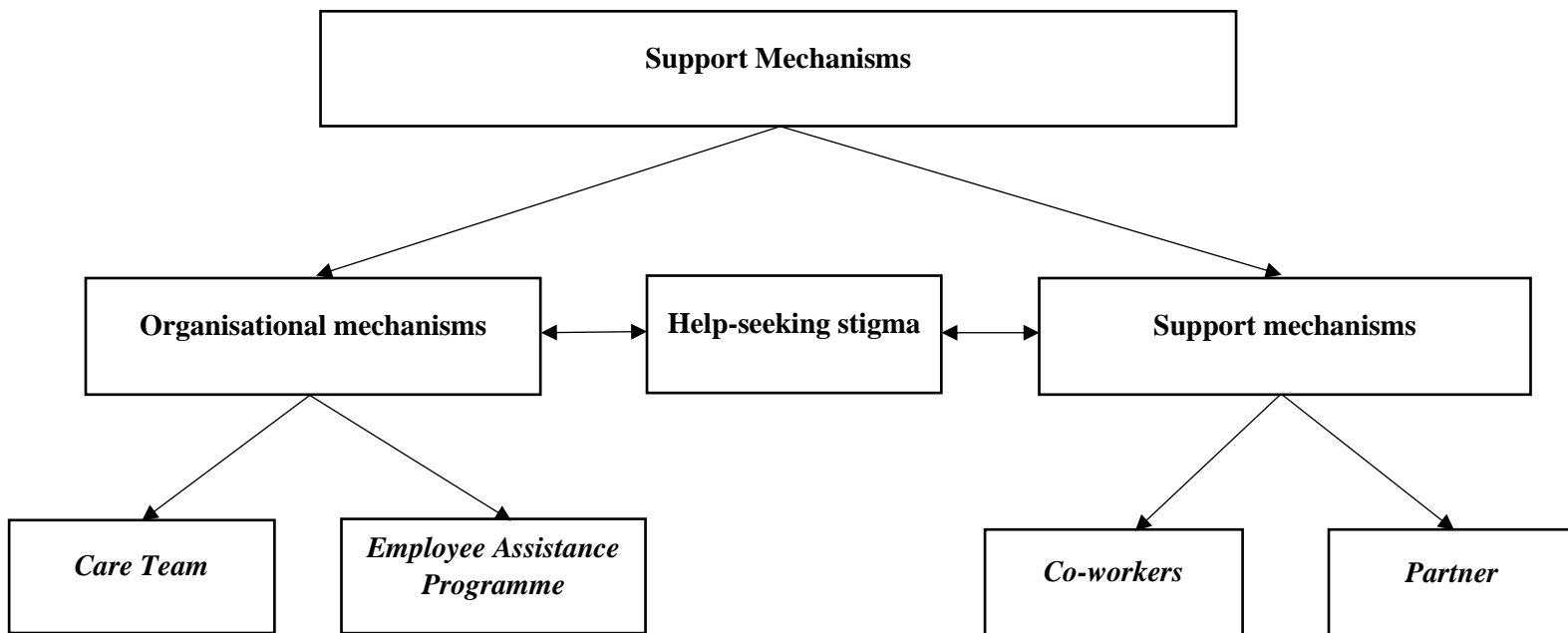
"in the car on the way home, I tend to put on a radio station where there's a phone in... especially when they tend to happen late at night you get some weird and wonderful people phoning up and I'm just thinking ((laughs)) and I have a little chuckle to myself" – [Fred]

"I'll put myself in front of the tele or I'll read a book, or I'll do something just to take myself into that comfort zone... For me I need to relax and chill, go home and have a shower or a bath and just take myself away from it." – [Elizabeth]

Theme 5: Support Mechanisms

The fifth theme encompasses the support mechanisms that participants identified as available to them and their attitudes towards using them. The support mechanisms differ to coping strategies in that they are resources that a person can draw on. The support mechanisms could be split into formal mechanisms provided by the organisation and social support from co-workers and/or their partner.

Figure 7. Thematic hierarchy of support mechanisms



Organisational mechanisms. Participants spoke of the local Care Team and the national Employee Assistance Programme (EAP) as support services for all staff. The Care Team is a formally arranged peer support group of staff from various departments in the prison. Triangulation of data, using HMPPS policies, supports this as the services available, indicating participants were aware of the mechanisms available to them. Participants had mixed views as to how likely they were to use these services and how helpful they perceived them to be.

Care Team. A member of the Care Team will usually approach staff immediately after their involvement in a serious incident to offer support. All participants mentioned the Care Team as a source of support and some had used it, either for negotiation related, or other reasons. Those participants rated the Care Team highly: *“I’ve used them a few times, er, really good, really good ... I think just having a cup of tea with somebody and just having a chat with them, it just helps”* – [Charlie]. It was interesting to note that most participants were not ready to talk about the incident until a few days later, after they had had time to reflect on it; however, having previously declined the offer of a chat, it was generally not offered again, leaving the negotiator with an unmet need:

“if somebody said to me ‘Are you alright Kevin?’ straight after, I’ll always say, ‘Yeah, I’m fine’, it may be two or three days after I’ll have had that time to mull it over and ‘Do you know, actually I was a bit annoyed by this or a bit frustrated by this, but by then it’s [the incident/offer of support] gone’” – [Kevin]

“sometimes self-harm’s really bad, seeing a vicious assault and stuff like that, you know, there is support there that you can see and people might say after, ‘You ok? Do you need any support with that?’, it’s kind of, once you’ve said, ‘No, I’m alright’ it’s never mentioned again... so you can see something really bad and if you don’t go off sick then there’s nothing more mentioned ever again about it” – [David]

Some participants that had not utilised the Care Team seemed to view it negatively, in that members were no more trained than their friends: *“I might as well just talk to my mate” – [Andrew]*, or were just doing a job: *“I just think it’s a token gesture, I don’t think it’s real” – [Andrew]*; *“it’s just a tick box exercise” – [Adam]*

Employee Assistance Programme (EAP). Most participants only spoke of the local Care Team when they thought about support. When specifically asked about the national EAP, all participants were aware of its existence though not all were aware of the services they provide, or how to access it: *“employee support? I don’t know. What do they actually do? I don’t know” – [Andrew]*. As with the local Care Team, those participants that had used the EAP had found it helpful, though no participants reported using the service for negotiation related incidents. It was noted that those participants that discussed having accessed the EAP had been referred by their manager, suggesting managerial input is important to ensuring staff access appropriate services:

“it was actually my boss who put me onto all of the options and they did actually provide counselling for me... I think especially employee assistance programmes, they’re there for a reason and they’re usually pretty good” – [Peter]

Social support. Aside from one participant who occasionally spoke to a family member, participants talked of social support only in the context of their co-workers and/or their partner.

Co-workers. All participants appreciated the support of their negotiator and non-negotiator colleagues and were content to discuss difficult incidents with them; however, pressures caused by low staffing levels, and running the prison regime, meant time was not available for the team to meet. Checking in with each other to share ideas for improving their practice, or to see how a colleague was after a difficult incident, was done by telephone or e-mail, if it was done at all:

“We swap e-mails about it, you know, we would chat on here or just phone each other up and that, erm, there’s no formal sort of meeting between negotiators about what we’re doing, it’d be very difficult to get them all together” – [Daniel]

“talk it over with colleagues if we get chance, which we haven’t been able to in the last couple of years because you don’t get chance, you can have a conversation on the phone” – [Victoria]

Many participants discussed the benefits of having a negotiator meeting. Two prisons had previously held negotiator meetings; however, these had ceased after a change in negotiator personnel and/or due to lack of opportunity. Many participants spoke of the value in starting a meeting where they could discuss learning from recent incidents and provide emotional support/monitor the wellbeing of their colleagues:

“encouraging us to meet as a group and talk through the incidents that we’ve had... and kind of off load with each other would be a start, and that would give us a forum... you can say ‘I struggled a bit with that’, ‘Why don’t you-’, cause if it’s another negotiator telling you that you should really speak to someone you’re more likely to take that, so I think that would be helpful” – [Jane]

“ages ago we did say that we’d start sitting down as a team and talking about negotiating and strategies and coping mechanisms and all these things... and we never have and we absolutely should be doing” – [Jack]

Partner. The majority of participants chose not to talk to their partner about the incidents they attend. The themes across the data were that if you have not experienced working in a prison environment then you would not understand, it would be too difficult to explain, and it might cause their partner to worry. Several participants explained that having to explain the complexities and terminology of prison life, in addition to talking about their difficult day, prevented them from discussing incidents with their partners. Further, the cognitive demands of the role meant they were tired, which lowered their tolerance for being asked questions and having detailed conversations:

“I don’t wanna talk about it to [partner], I’ve just talked the hell out of it for hours, like ‘How’s your day?’, ‘We had one on the roof’, ‘Oh what happened?’, I don’t wanna go through this again, you know, cause, ‘Oh he’s on basic this lad and he got on the roof’, ‘What’s basic mean?’, I don’t want to have that conversation... I’m getting frustrated now because I’m having to explain everything about the prison service and not actually the incident, I’d rather speak to somebody from work who knows what I’m saying” – [Kevin]

“[Partner] will say something like, ‘What’s gone on there?’ normally I’ll just say, ‘It’s just a bit of nonsense’, you know, I don’t wanna go through it again... I don’t take it home, I don’t want [partner] to worry” – [Syd]

Help-seeking stigma. Many participants talked of a stigma related to mental health issues and help-seeking. The presence of a help-seeking stigma in HMPPS was perceived by the majority of participants. This was not openly discussed amongst colleagues and was an issue that remained in the background. As a consequence of perceived stigma, many participants reported they would not ask for help if they needed it. As illustrated in Figure 7 (p. 136), the perceived stigma influenced negotiators’ decisions about utilising organisational and social support mechanisms. Interestingly, whilst help would not actively be sought, most participants would accept support if it was offered. Help-seeking stigma could be seen by the subtle way that support is offered: *“where ever I’ve worked, a prison officer’s way of asking you if you’re alright is ‘D’yer wanna brew?’ he’s really putting his arm round me saying ‘Everything alright?’” – [Kevin]*, as well as explicit statements pertaining to an unwillingness to seek support:

“we have a debrief... and then sometimes they’ll say, ‘Oh you know if you need any like extra support then get in contact with whoever’, but, like in our job you don’t tend to do that, it’s, people don’t tend to ask for more help... it’s not really seen as the thing to do” – [Ann]

“it’s easy in a hot debrief, ‘If anybody needs support see the Care Team’, I’m not gonna go voluntarily and see the Care Team, I’m not, nobody is... everyone wears a coat of armour, whether you’re a prisoner or a prison officer, so to see a weakness, it’s hard to admit... it would take somebody to approach me” – [Kevin]

Discussion

In the absence of any literature pertaining to the experiences of serious incident negotiators in a prison setting, the current study aimed to provide an initial exploration of the experiences of prison officers who undertake this important role. Using a qualitative methodology to capture the detail of the negotiators’ experiences, five overarching themes were identified which addressed the research questions: *‘Characteristics of Incidents’*; *‘Stressors’*; *‘Experience of Stress’*; *‘Coping Strategies’*; and *‘Support Mechanisms’*. In addition, there was an underlying theme related to the pressure of the prison regime which weaved through each of the main themes. The main themes shall be discussed in turn, including a discussion of the link to the underlying theme, to provide a coherent account of the findings.

The types of negotiating experiences that prison officer negotiators have can be answered by the theme *‘Characteristics of Incidents’*. The findings of the current study, in terms of negotiators’ perceived function of serious incident behaviour, are in line with

those identified by McNeill et al. (2018b). Themes with the same essence as the current study related to: achieving a specific goal; taking control; not feeling listened to; to communicate a need; seeking separation from others; and a consequence of difficult emotions. In contrast to the study by McNeill et al., negotiators in the current study did not identify a possible function of the behaviour was for the perpetrator to gain an opportunity for reflection.

Several of the perceived functions of serious incident behaviour could be contributed to by the prison procedures and regime. Certainly, goal-oriented behaviours could be driven by a lack of autonomy in choice, decision-making, and in effecting change to a problem. This could be explained by self-determination theory which postulates that autonomy, where one is in control of their own thoughts and decisions, is an innate psychological need (Deci & Ryan, 2000). Clearly, living within a prison environment takes away one's autonomy, where even the most basic of decisions, such as when to eat a meal, are removed from your control. The principles of procedural justice could also explain serious incident behaviour in situations where there has been a lack of communication in the process of decision-making which has had an impact on them, particularly where the outcomes of decisions are seen to be unfair (Beijersbergen, Dirkzwager, Molleman, van der Laan, & Nieuwbeerta, 2015).

The types of behaviours described in the current study show similarities to those described by McNeill et al. (2018a, 2018b) in terms of riots, barricades, roof-top protests, and hostage-taking; however, the collusive behaviour in hostage situations was not identified in the psychiatric samples. It is possible that this behaviour does occur but was not reported. Many of the situations faced by negotiators in secure forensic settings appear to have similarities with the conflict and crisis situations managed by police in the

community (see Grubb, Brown, Hall, & Bowen, 2018); however, it is possible that the motives and function of the behaviour differ. Participants in the current study identified self-harming behaviours as being particularly difficult to deal with.

Most of the behaviours in the current study would fit into the definitions of crisis (Carkhuff & Berenson, 1977) and conflict (Vecchi, 2009) situations; however, it is suggested that a third category of behaviour was described in the current study. Some behaviours were viewed by participants as being driven by boredom or a need for excitement (e.g., climbing at height and throwing food). Whilst the behaviour could be seen to be goal-oriented, it is argued that it does not fall neatly into a crisis or conflict definition given an absence of heightened emotion, or planning, and no demands. The behaviour could be described as more disruptive than conflictual or crisis. It is suggested that the term ‘disruptive behaviour’ is more aligned with this type of behaviour. It can be defined as ‘non-confrontational behaviour, lacking in demands and obvious intent to cause harm, which disrupts the regime and/or requires the deployment of a specialist team’.

Six sub-themes were identified under the overarching theme of ‘*Stressors*’. Several sources of incident-related stress, identified in the current study, replicated those found in the extant empirical and non-empirical literature with police officer negotiators, including: being observed (McMains & Mullins, 2015); physical stressors (McMains & Mullins, 2015); fear of poor performance (Bohl, 1992; Sachs, 1996; Spence & Millott, 2016); a lack of understanding of the negotiator role from colleagues (McMains & Mullins, 2015; Norton & Petz, 2012); difficulty progressing dialogue (Bohl, 1992); a formal inquiry into their performance (Spence & Millott, 2016); lack of control at the scene (Fagan, 2003; Grubb, 2016); non-negotiator trained colleagues becoming directly involved (Grubb, 2016; Sachs, 1996); threats of harm (Sachs, 1996); and negotiating alone (Grubb, 2016). Some

studies with police samples have reported that public and media scrutiny is a stressor (e.g., Sachs, 1996); however, probably due to prison officer work being hidden from the public, this was not identified in the current study. Legal scrutiny was, however, identified in the current study as a stressor but not in the studies with police officer samples. It is possible that this is due to prison officers' lack of knowledge of the law and judicial system which would not be the case for the police.

The pressure of the prison regime underpinned this theme in several ways; for example, on occasions it is not possible to manage an incident from the command suite due to lack of staff to operate the command suite and also run the regime. There can also be pressure to resolve incidents as soon as possible so staff can be released at the end of their shift. Prisoner boredom with the regime can also result in serious incidents. Further, a lack of negotiators in some establishments means that, on some shifts, there might only be one negotiator (or none) on duty, increasing the likelihood of being deployed as a lone negotiator. Working as a lone negotiator was a stressor also identified by Grubb (2016) in a sample of police officer negotiators. In this sample, and in the current study, the stressor was related to feeling isolated from the lack of support, and from the difficulty in communications with the silver commander. It seems working in a prison setting brings other stressors from a lone deployment in relation to role ambiguity and some negotiators' perceptions they are working outside of policy. McMains and Mullins (2015) suggested role ambiguity was a source of stress for police negotiators; however, this was in the sense that it was at odds with their general police officer role of arresting criminals. The current study identified role ambiguity in terms of lack of clarity for some negotiators as to what is expected of them in lone deployments. It appears this may be due to a lack of understanding of the role from managers, and/or clarity in how they deploy negotiators.

Without speaking to managers, it is not possible to corroborate this theory. In any case, it is important for this to be addressed as ambiguous role expectations have shown to contribute to stress in prison officers (Armstrong & Griffin, 2004; Schaufeli & Peeters, 2000) and that role clarity can be a protective factor to mental health difficulties (Kinman, Clements, & Hart, 2017).

Poor management of the scene was a key finding in the current study that was also reported by Grubb (2016). This related to non-negotiation trained staff becoming directly involved in negotiations and indirectly involved by stopping to observe what was happening. This was distracting for negotiators, though, in the current study, it was considered that colleagues lacked understanding of how they should behave during serious incidents and how they could support their negotiator colleagues.

Participants in the current study reported a similar experience of incident-related stress to that found by Grubb (2016) and Spence and Millott (2016) in terms of the range of feelings and emotions experienced. In the current study, negative experiences were linked to: observing a risk to, or actual, serious harm/loss of life; lone deployments; and fear of legal comeback. 'Frustrations' were linked to physical stressors and poor scene management. Positive affect was linked to the role being cognitively demanding and the mental challenge that the role can bring. These findings would provide support for Folkman and Moskowitz's (2000, 2004) model of stress that purports positive and negative stress may co-occur during the same stressful incident. It was interesting to find that most participants found their regular prison officer role was more stressful than negotiating. The day job as being more stressful was also reported by police officers in the study by Spence and Millott.

Several cognitive and behavioural coping strategies were identified that the negotiators used during and after incidents, including: playing down the seriousness of the situation; externalising responsibility; team working; compartmentalising; and using debriefs. No judgements are made here as to whether the strategies adopted are problem- or emotion-focused/adaptive or maladaptive as it is deemed beyond the scope of this study. In line with previous studies (Sachs, 1996; Spence & Millott, 2016; Terhune-Bickler, 2005), humour was a coping strategy adopted by several negotiators in the current study. Humour is well established in the literature as a coping strategy for prison officers (Arnold, 2017; Barry, 2017; Crawley, 2004), and other human service workers who face traumatic incidents (Tracy, Myers, & Scott, 2006). It has been suggested that humour serves to lighten the air and boost camaraderie (Scott, 2007). Zijderveld (1983, p. 45) claims that through laughter and joking “emotional experiences which are hard to express verbally are [thus] made collective and communicable. Cognitive and emotional dissonances are lifted, and reality is restored”. This explanation would seem to fit with the function of humour in the current context when considering the finding that there is a reluctance to ask for help/support when needed. As an alternative to help-seeking, any emotional ‘fall out’ can be communicated and managed through the culturally accepted method of humour. From a theoretical perspective, the function of humour described in the current study can be understood by relief theory which postulates that humour serves to release tension (Buijzen & Valkenburg, 2004; Meyer, 2000). In this model, laughter acts as a mechanism to release an accumulation of tension or energy allowing the individual to return to a state of normality. In this sense, humour and laughter would serve as a useful coping strategy for negotiators to use immediately following an incident, especially as other coping strategies

may not be available (e.g., distraction strategies). The use of humour as a coping strategy has also been found with police negotiators (Grubb, 2016).

It was interesting to find that most negotiators found it difficult to identify how they coped whilst negotiating and would refer to just going into ‘autopilot’. Barry (2017) found a similar phenomenon in a study exploring how prison officers cope dealing with a death in custody. In that study, prison officers also described going into autopilot, and just getting on with the job. This could be explained by ‘turning off’ the emotional impact of the incident so they can focus purely on the tasks and procedures to follow. Indeed, Arnold (2017) suggested that emotional detachment can help prison officers cope by providing a buffer to emotional discomfort, allowing them to do the difficult aspects of their job.

Debriefs were considered a key coping strategy by all participants for several reasons: to give and receive feedback for learning and development; to reflect on the experience with others; and to get any frustrations out in the open. Some participants also had the benefit of a negotiator only debrief with the silver commander which was very much welcomed as a forum to ‘come down’. It is pertinent that debriefs, and proactive Care Team involvement, were not provided after lone deployments, as these were often the most stressful/difficult incidents. It is likely that these are the most stressful incidents due to several of the strongest stressors across the data coming together in these cases: ‘*Lone deployment*’; ‘*Poor scene management*’ (as it is not an ‘official’ incident); and the prisoner being “*Broken*” (self-harming behaviours). In these cases, due to the pressure of the prison regime, the negotiator will simply finish the ‘job’ and move onto the next one. The culture that you have to keep on going and get back to normal as quickly as possible is a common finding in the prison officer literature (e.g., Barry, 2017; Crawley, 2004). This is not surprising given there are several hundred other prisoners who would be affected if the

regime needed to be curtailed due to staff not being in the required place. It is possible that, when a number of stressors co-occur, one's ability to maintain emotional detachment could be reduced, placing psychological wellbeing at risk. This is an important finding as help-seeking stigma prevented many participants from initiating contact with a support mechanism, potentially leaving negotiators with an unmet need.

Organisational support mechanisms available were similar to those found with police samples and included national employee support/occupational health services, including access to mental health professionals. The current study also identified a formal peer support team (Care Team) based in each prison establishment. Similar to the studies by Grubb (2016) and Spence and Millott (2016), participants in the current study had different experiences in terms of the support available; for example, not all participants were debriefed by the silver commander as a negotiation team. Similarly, not all participants were aware of the specific support services available or how to access them. Interestingly, participants who had used organisational support mechanisms had found them helpful, while those who had not used them held negative perceptions of them. Some negotiators had previously enjoyed negotiator meetings; however, the pressure of maintaining the running of the regime, under reduced staffing levels, seemed to act as a barrier to negotiators getting together.

Social support from co-workers was important for all participants in the current study, which supported the findings from studies with police samples (e.g., Grubb, 2016; Spence & Millott, 2016; Terhune-Bickler, 2005). Those studies also found that some negotiators would seek support from their spouse, or other family member. In contrast, almost all participants in the current study reported they would not discuss the incident with their partner. The reasons for this seemed two-fold. The first being their partner's lack

of understanding of prison life meant they were unable to freely discuss the incident, as they needed to intersperse their story with having to explain side issues. This made talking about the incident frustrating, particularly when they were already cognitively, and perhaps emotionally, drained. The second reason was that they did not want to worry their partner. Unfortunately, the studies with police samples did not explore/report the reasons behind the choice of social support and so comparisons cannot be made.

Help-seeking stigma was apparent across the current data. Previous studies have hypothesised that negotiators have not sought support due to perceived stigma (Spence & Millott, 2016; Terhune-Bickler, 2005), though this has not previously been explored. The current study appears to demonstrate a situation where organisational support mechanisms are being offered to negotiators at the wrong time (too soon after the incident – or not offered at all) and not being offered at the right time (after a period of reflection). The benefits of social support from co-workers and supervisors has frequently been shown to have positive outcomes for prison officer wellbeing (Cheek & Miller, 1983; Lambert, Altheimer, & Hogan, 2010; Schaufeli & Peeters, 2000); however, if emotional discomfort is masked, a person's potential social support network may not pick up cues that support is needed and so may not provide it. The findings would suggest that negotiators are unlikely to seek support, though they will accept it if it is offered in the days after a difficult/distressing incident.

Limitations of the Study

A strength of this study is its qualitative design which enabled an exploration of the experiences of prison officer negotiators that cannot be captured using quantitative methods. The range in the length of service as a prison officer and negotiator, and the

diversity of incidents the participants had experienced, allowed for a variety of experiences to be captured. The study does, however, have limitations which must be acknowledged.

Participant bias may have been introduced into the study given it was voluntary and it is not known how the experiences/perspectives of those that did not participate differ from those that did (Costigan & Cox, 2001). The sample was also based in one geographical area; however, the majority of participants had experienced working as a negotiator in establishments across England, providing a more holistic picture of HMPPS negotiator experiences.

As with all self-report data, participants choose what to disclose and how they want to present it. Further, our view of our experiences can change over time, or in the context of the situation the experience is recounted. It is therefore possible that a participant's account may have differed had the interview been conducted on another day. Related to this is the recency and experience of the participant's most recent negotiation event. For example, a positive or negative experience of the management of the scene, or the provision of a satisfactory debrief, may have coloured the lens of their view of other events. It was noticed, however, that all participants spoke of different incidents through the interview. Finally, whilst the researcher kept a reflective journal and remained mindful of introducing researcher bias throughout the process (see Appendix T for Researcher Reflexive Statement, p. 261), bias cannot be ruled out.

Implications for Practice

In view of the finding that non-negotiator trained staff can be a source of stress when they are unaware of the negotiator role, awareness training for staff is recommended as follows: for all staff on the role and responsibilities of the negotiator and how they can

assist negotiators during incidents; awareness training for managers on the role of negotiators during lone deployments and how to manage an incident scene. Care Teams should also be informed of the benefits of ‘checking-in’ with negotiators in the days following a serious incident. In view of the finding that some participants are not aware of how this work could be affecting them, and the general reluctance to seek help, consideration should be given to introducing mandatory health checks of psychological wellbeing. Further, providing training on stress awareness and how to manage reactions to trauma could be helpful. This should include: information on the normal reaction(s) to experiencing a traumatic event; signs to be aware of that seeking help might be beneficial; and identification of cognitive coping strategies for the individual to assist in the management of emotions during an incident.

Some participants were explicit that they would value the opportunity to meet as a negotiation team to discuss learning and best practice, and to check in on each other. This would be a useful mechanism for providing peer support to monitor the potential build-up of stress/pressure. A recommendation is therefore made to (re-)commence negotiator team meetings. The frequency of the meetings should be set by the individual establishment so as to be responsive to need. The benefits and opportunity for a region-wide or national negotiator meeting could be considered.

In view of the benefits and value placed on debriefs as a coping strategy by all participants, it is recommended that all staff involved in a serious incident have the opportunity for a debrief. Consideration should be given to providing a separate negotiator team debrief by the silver commander. Information on the specific services provided by the EAP should be provided (e.g., critical incident debriefing), along with how to access such services would be beneficial. Finally, to assist with recall in the event of an inquiry into an

incident, a recommendation is made to improve record keeping of incidents from the perspective of the negotiator.

Directions for Future Research

The results of the current study are the first known to examine any aspect of the prison officer negotiator role. The findings have provided a platform from which further qualitative research, and the commencement of quantitative research with this group, can be directed.

Qualitative research could replicate the study by Ireland et al. (2014) exploring the motivation for engaging in serious incident behaviour from the perspective of prisoners. Similarly, it would be useful to replicate the study by McNeill et al. (2018a) using the SORC framework to understand the function of the behaviour for those held in a prison setting. More specifically, the use of this framework would provide insight into: intrapersonal and environmental factors; previous behaviours, values, and beliefs; the behaviour displayed; and the reinforcers of the behaviours. Self-hostages engaging in self-harming behaviours should be included, subject to ethical considerations, as these incidents have not yet been explored in the context of serious incidents. From a theoretical perspective, these incidents are likely to differ from other serious incident behaviours (e.g., a planned protest or hostage-taking), in that they are more likely to be explained by an individual experiencing a crisis (Carkhuff & Berenson, 1977) rather than being conflict driven (Vecchi, 2009). Collectively, research addressing these recommendations would assist in the development of negotiation strategy through having greater understanding of the motivation and function of both conflict and crisis behaviours which lead to serious incidents. On a practical level, this research would be useful to identify potential risk

factors to prisoners engaging in this behaviour and, from a strengths-based approach (Fortune, Ward, & Polaschek, 2014), identifying protective factors that could be strengthened. The findings from this work could be used to make recommendations for reducing risk factors and strengthening protective factors. The aim of this work should be to reduce the number of serious incidents that occur.

Currently, the understanding of the coping strategies adopted by prison officer negotiators, during an incident, is constrained by the participants' ability to recall them. It may therefore be helpful to use a validated psychometric questionnaire to quantitatively measure coping style, and coping strategies, in a standardised manner. The Coping Inventory for Stressful Situations (CISS; Endler & Parker, 1999), critiqued in Chapter 4, could be used to measure cognitive and behavioural coping style, supplemented with the CISS: Situation Specific Coping (CISS: SSC; Endler & Parker, 1999) questionnaire to measure coping strategies in a specific negotiation situation(s). The findings could prove helpful for providing support proportionate to the type of incident and perhaps personalising support. Using the Cognitive Emotion Regulation Questionnaire (CERQ; Garnefski et al., 2002) would allow comparisons of cognitive coping strategies to be made with those of police officer negotiator samples in the studies by Grubb, Brown, and Hall (2015) and Young (2016). In line with the concept of proactive coping (Greenglass, 2002), findings from future coping research could assist in the design of training to develop negotiator awareness of emotional management techniques, and to identify strategies to help each individual in the management of their emotions, during future negotiations.

Conclusion

This study has provided the first insight into the role of the prison officer negotiator. The different types of incidents that prison officer negotiators deal with have been identified, along with their perceptions of why prisoners may engage in serious incident behaviour. Staff training has been recommended to address the key stressors of the role associated with the management of the scene and ensuring role clarity during lone deployments. The finding that negotiating is a positive, challenging, and enjoyable role for most negotiators, fairs well for the retention of the current negotiator trained staff. These views and experiences could be shared more widely as a recruitment tool to encourage more prison officers to train as a negotiator. This would assist in building negotiator teams of sufficient size that would ensure negotiators always have at least one other negotiator for support. Further, it has been identified that support may be more relevant in the days following a serious incident rather than immediately after it. With this knowledge, the Care Team can ensure support is provided at the right time.

Finally, when considering the findings of the current study with the experiences of police negotiators, it would seem a key difference with prison work is the complicating factor of the prison regime. Within a prison context, the impact of an incident can have far wider reaching consequences to others than just those immediately involved. A disrupted regime has the potential to impact on several hundred other lives that must also be carefully managed.

CHAPTER 4

THE COPING INVENTORY FOR STRESSFUL SITUATIONS (ADULT VERSION): A PSYCHOMETRIC CRITIQUE

Introduction

The systematic literature review presented in Chapter 2 identified the limited understanding of the coping styles of critical incident negotiators (Grubb, Brown, & Hall, 2015; Young, 2016). Given the potentially harmful effects of stress on health (Higgins & Endler, 1995; Penley, Tomaka, & Wiebe, 2002), and the levels of stress under which negotiators are required to perform (McMains & Mullins, 2015), this is somewhat surprising. This review will examine the psychometric properties of a coping inventory which could be utilised to measure coping styles with this population.

Theoretical and Assessment Issues with Coping

In Chapter 1, two theoretical issues with regards to coping were discussed. The first related to coping as being a stable or flexible construct, and the second regarding the different dimensions used to classify the different coping behaviours. The approach to coping as either a stable or flexible construct has led to much debate in the assessment of coping literature; however, there seems to be a consensus that coping strategies can essentially be classified as problem- or emotion-focused (Lazarus & Folkman, 1984). Indeed, many of the available coping inventories have attempted to tap into both these dimensions (Billings & Moos, 1984; Carver, Scheier, & Weintraub, 1989; Folkman & Lazarus, 1988; Pearlin & Schooler, 1978). A third coping category, labelled ‘avoidance’, has been identified by other researchers and is included in some coping assessments (Amirkhan, 1990; Billings & Moos, 1981; Nowack, 1989).

Whilst several assessments exist to measure the construct of coping, the Coping Inventory for Stressful Situations (Adult Version) (CISS; Endler & Parker, 1999) has been chosen for this review. The CISS was chosen for several reasons. First, it was developed to

provide an alternative to existing measures which have come under criticism for having poor psychometric properties (e.g., Endler & Parker, 1990a, 1994; Stone, Greenberg, Kennedy-Moore, & Newman, 1991). Second, it has the potential to be used in research and clinical practice. Third, it has been the focus of several studies which have tested its psychometric properties, thus enabling a detailed review.

This review will commence by providing an overview of the CISS in relation to its theoretical background, development, administration, and scoring. The review will then move on to explore the psychometric properties of the CISS using Kline's (1986) criteria of the characteristics required for a good psychometric test. The criteria are: to be at least an interval scale; be reliable; valid and discriminating; and have appropriate norms. The review will then progress to making concluding comments on the psychometric robustness of the CISS, limitations of the tool, and its utility in forensic settings.

Overview of the CISS

Theoretical Background

The CISS was developed from the theoretical standpoint that individuals have a relatively stable coping style and embraces the empirically recognised coping dimensions of problem-, emotion- and avoidance-focused coping. Based on empirical research, Endler and Parker (1990a, 1994) suggest avoidance-oriented coping can be separated into person-oriented strategies (e.g., seeking interaction with another person), and task-oriented strategies (e.g., watching television).

Development of the CISS

The current CISS is a refined version of the Multidimensional Coping Inventory (MCI; Endler & Parker, 1990b). The MCI was developed by asking psychologists and psychology undergraduates to generate a list of coping behaviours. The initial 70-item inventory was administered to 559 undergraduate students and, following principal components analysis (PCA), three meaningful factors were extracted and labelled *Task-Oriented*, *Emotion-Oriented*, and *Avoidance-Oriented* coping. The scale was reduced to 44 items by removing redundant items, and those lacking in face validity, i.e., those that do not appear to be measuring the construct of coping. A subsequent PCA factor analysis yielded a ten-factor solution by eigenvalue (Kaiser, 1960), and three factors using Cattell's (1966) scree plot criteria. It would appear that, probably on theoretical grounds, Endler and Parker preferred the three-factor solution as they rotated the three, yielding factors of 19 *Task-Oriented*, 12 *Emotion-Oriented* and 13 *Avoidance-Oriented* items. Separate factor analyses for males ($n = 275$) and females ($n = 284$) yielded the same factorial results (Endler & Parker, 1988, 1990a).

With the aim of achieving sub-scales with an equal number of items, further items were generated for the *Emotion-Oriented* and *Avoidance-Oriented* scales. The resultant 66-item inventory was administered to 394 college students ($n = 275$ males; $n = 130$ females) and to 284 adults ($n = 154$ males; $n = 130$ females) (Endler & Parker, 1990a). The items for each sample were analysed separately using PCA. Using the scree test criteria, three factors were rotated for each of the samples. Items that loaded 0.35 or above on two or more factors, items that did not load 0.35 or above on any one of the three factors, and items that had poor face validity, were eliminated. This resulted in a 48-item inventory, now called the CISS.

The CISS has three 16-item scales that retained the labels *Task-Oriented*, *Emotion-Oriented* and *Avoidance-Oriented* coping (see Table 4 for a description). Following factor analysis of the three scales separately, Endler and Parker (1990a) reported the *Task-Oriented* and *Emotion-Oriented* scales to be unidimensional; however, the *Avoidance-Oriented* scale yielded two factors. One sub-scale was labelled *Distraction* (8-items) and the other *Social Diversion* (5-items). The remaining three items loaded on to both, or neither, factor and so did not form part of either sub-scale. The 48-item inventory was found to have the same factor structure for both males and females, as well as for college students and adults, when comparisons were made using congruence coefficients (Endler & Parker, 1990a).

Table 4

Description of the Coping Scales (Endler & Parker, 1999)

Name of scale	Description
<i>Task-Oriented</i>	Describes purposeful task-oriented efforts aimed at solving the problem or attempts to alter the situation. The main emphasis is on the task, or planning, and on attempts to solve the problem.
<i>Emotion-Oriented</i>	Describes emotional reactions that are self-oriented. Reactions may include blaming oneself, daydreaming/fantasising, or getting angry. In some cases, the reaction may increase the level of stress.
<i>Avoidance-Oriented</i>	Describes activities and cognitive changes aimed at avoiding the stressful situation. This may be through distraction by using other situations or tasks, or by social diversion.

Administration and Scoring

The CISS is an easily administered self-report measure which can be completed by a typical respondent within 10 minutes. Prior to commencing the assessment, respondents are asked to think of a variety of difficult, stressful, or upsetting situations before making their responses. Respondents are then asked to indicate how much they engage in a behaviour when responding to a stressful situation by circling a number between 1 “Not at all” and 5 “Very much” on a Likert-type frequency scale.

The scores are summed for each of the main scales and the two sub-scales. The potential range of raw scores for the three main scales is from 16 to 80. The range for the 8-item *Distraction* sub-scale is from 8 to 40 and the 5-item *Social Diversion* sub-scale from 5 to 25. The higher a score is on a scale the more likely the respondent is to use that coping style and, conversely, the lower the score the less likely they are to use that style.

Helpfully, the raw scores can be converted into *T*-scores and percentiles which allows for direct comparisons to be made between the scales. The *T*-scores are presented separately for males and females for each of the groups of norms, allowing for comparisons with the respondent.

Psychometric Properties of the CISS

Level of measurement. Kline (1986) purports that test constructors should aim to produce ratio scales, that is, where there is a true zero. Where this is not possible, Kline advocates an interval scale as the minimum standard that should be accepted for a good psychometric test. Where psychometric tests are theory driven, to measure psychological constructs, such as coping, ratio scales are not appropriate as there can be no true zero point. The aim must therefore be for an interval scale.

The CISS uses a five-point frequency rating, Likert-type, scale. Whilst each item on the inventory is an ordinal level of measurement, when the items are combined to assess the construct of coping, the data can be treated as interval (Allen & Seaman, 2007). This is considered a sensible approach as it allows for more meaningful analysis of the data, thereby making a greater contribution to clinical practice and research (Nunnally, 1978).

The CISS also conforms to some general points on the construction of Likert scales which strengthens its utility as a measurement tool. It has a graphic, as opposed to numerical, scale, which is considered superior and less liable to error (Nunnally, 1978) and, by having a mid-point (3), there is an option for people to respond neutrally. Whilst this can result in false high ratings, Kline (2000) considers this preferable to not having an ‘uncertain’ category; being of the view that, if the items are relevant, the chance of neutral responding will be much reduced.

Reliability. Kline (1993) reports that, in terms of psychometrics, reliability has two meanings; one refers to internal consistency and the second that the test is stable over time.

Internal consistency. Internal consistency is concerned with ensuring that all items within a test that intend to measure the same construct are indeed measuring the same thing (Kline, 1986). Coefficient alpha is considered the best measure of internal consistency (Cronbach, 1976; Kline, 1993; Nunnally, 1978) with Cronbach’s alpha (Cronbach, 1951) the most commonly used. Most researchers argue that, for a test to be valid, internal consistency must be at least .70 (e.g., Guilford, 1956; Nunnally, 1978); however, Cattell voices concerns over this, reporting that very high internal consistency may be due to several test items being too similar, something he terms ‘bloated specifics’ (Cattell, 1973).

Furthermore, Kline (1986) and Guilford (1956) recommend a sample size of at least 200 subjects for reliability studies.

The CISS appears to have very good internal consistency. Endler and Parker (1990a) reported Cronbach's alpha separately for males and females for their normative samples of adults, undergraduates, and psychiatric inpatients. Cronbach's alphas for the adult male sample were adequate to high and ranged from .72 (*Distraction* scale) to .90 (*Task-* and *Emotion-Oriented* scales). Alphas for the adult female sample were equally as good and ranged from .72 (*Distraction* scale) to .89 (*Emotion-Oriented* scale). Internal consistency for the undergraduate sample also fared well with Cronbach's alphas ranging from .78 for the male undergraduates (*Distraction* scale) and .78 for the female undergraduates (*Social Diversion* scale) to .90 for both the male and female samples (*Task-Oriented* scale). The psychiatric sample had slightly lower alphas for both sexes on the *Emotion-Oriented* scale, and on both the *Avoidance-Oriented* and *Distraction* scales for the female sample. Cronbach's alpha figures for the psychiatric inpatient sample were adequate to high, ranging from .73 (*Distraction* scale) to .91 (*Task-Oriented* scale) for males and from .69 (*Distraction* scale) to .90 (*Task-Oriented* scale) for females. No information is given on the mental stability of the psychiatric sample at the time of testing and it is possible that some respondents may have had difficulty in concentrating on the test until its completion, thereby affecting consistency in their responses.

Considering Cattell's (1973) concerns regarding bloated specifics, each of the individual items on the measure were reviewed. The author considered that items on the *Task-* and *Emotion-Oriented* scales were sufficiently different; for example, *Task-Oriented* items include, "*Schedule my time better*" and "*Adjust my priorities*". *Emotion-Oriented* items include, "*Blame myself for procrastinating*" and "*Take it out on other people*".

Whilst five items on the *Avoidance-Oriented* scale are very similar (e.g., “*Visit a friend*” and “*Phone a friend*”), this scale had the lowest internal consistency of the three main scales, for all samples, except male psychiatric patients. All five similar items form the *Social Diversion* sub-scale.

Exploring the *Social Diversion* sub-scale further, mean inter-item correlations were in the high range for all samples and genders at $r = \geq .40$, with the exception of the adult male sample which was still high at $r = .37$ (Endler & Parker, 1990a). This would suggest that some items within the scale are redundant (Briggs & Cheek, 1986). A further problem with the *Social Diversion* scale, along with the *Distraction* sub-scale, is that they have less than the recommended minimum of 10 items, raising questions about their bandwidth (Kline, 2000).

Very good internal consistency has been reported by other researchers using different populations. In their study with 298 outpatients with major depressive mood disorder, McWilliams, Cox, and Enns (2003), reported Cronbach’s alphas between .74 (*Avoidance-Oriented* scale) and .92 (*Task-Oriented* scale). The *Social Diversion* sub-scale performed less well ($\alpha = .66$), a result that was replicated in a sample of adults with Parkinson’s disease ($n = 471$; *Social Diversion* $\alpha = .67$) (Hurt et al., 2011). It is possible that items within the *Social Diversion* scale are not relevant to these clinical populations, leading to guessing or providing an answer so as not to leave a question ‘blank’.

Using the validated Dutch version of the CISS (de Ridder & van Heck, 2004) with patients with newly acquired brain injury, Brands, Köhler, Stapert, Wade, and Heugten (2014) ($n = 139$) reported a Cronbach’s alpha range from .88 (*Task-Oriented* scale) to .92 (*Emotion-Oriented* scale) demonstrating high internal consistency for this clinical population. Interestingly, the *Avoidance-Oriented* scale performed well in this study with

an alpha of .90; however, participants had been instructed to think about how they had coped with one specific problem when completing the inventory, which may have skewed the results.

Overall, the CISS has good internal consistency for populations other than those for which it has norms; however, it should be noted that the sub-scales of the *Avoidance-Oriented* scale perform least well and, in some studies, performed below the level considered acceptable for a good test. Questions about the reliability of the *Social Diversion* scale must also be raised due to concern over the similarity of some items, rendering them redundant. Given this similarity and, for the most part, only adequate Cronbach's alpha levels, it would appear that test items on this scale are unclear. This is explored further as part of face validity. Positively, the CISS performs better than other coping measures with the same theoretical underpinning, with Carver et al. (1989) reporting Cronbach's alphas for the COPE (Carver, Scheier, & Weintraub, 1989) of less than .70 for six of its 13 scales and the Miller Behavioural Style Scale (5-point version) (Miller, 1987), having figures as low as .41 for the *Blunting* scale (Rees & Bath, 2000).

Test- retest reliability. Test-retest reliability is the concept that, when there has been no intervention to the variable being measured, a test score should remain the same when the test is taken at two points in time (Kline, 1986). Kline (2000) states that the minimum correlation figure of a good test is .80 and that the interval between tests should be no less than three months.

Streiner and Norman (2008) report that test-retest correlations are expected in the high .70s when measuring a relatively stable construct within a 12-month interval between tests; however, Endler and Parker (1990a) reported test-retest correlations of between .68

and .73 for the *Task-* and *Emotion-Oriented* scales in a sample of 238 undergraduates ($n = 74$ males; $n = 164$ females) demonstrating lower reliability than to be expected. The *Avoidance-Oriented* scale and its two sub-scales ranged from .51 to .60. These results are disappointing given the test-retest period was just six weeks. One explanation for this could be that respondents answered the items whilst thinking about a different stressful event, involving the use of different coping strategies, on each test occasion, thus altering their responses. There are three ambiguous items in the *Task-Oriented* scale where two different behaviours are referred to; for example, “*Determine a course of action and follow it*”, which may have affected the correlation figure. The first half of the item is task-focused, which a respondent may agree to, yet their subsequent behaviour may be to avoid following the course of action if it were believed to be too difficult. This would leave the respondent in a dilemma as to how to respond and they may respond differently on different occasions.

Hurt et al. (2011) reported better correlations in their study with adults with Parkinson’s disease ($n = 371$). With testing periods twelve months apart, correlation scores ranged from .60 (*Distraction* sub-scale) to .79 (*Emotion-Oriented* scale). The *Avoidance-Oriented* scale yielded the greatest difference between baseline ($r = .58$) and 12-month ($r = .72$) scores.

Validity. Whilst reliability is necessary for a test to be valid, it is not sufficient on its own (Kline, 2000). Validity is an overarching term for several concepts that must be met if a test can be said to be valid; that is, measure what it claims to measure. According to Kline (1986), the following concepts must be met; criterion validity (to include concurrent and predictive validity), construct validity (to include convergent and

discriminant validity), content validity, and face validity. These shall now be discussed in turn in relation to the CISS.

Concurrent validity (Criterion validity). Concurrent validity is the concept that a test should correlate with another test, known to be a valid measure of the same construct, when administered at the same time (Kline, 2000). Very few studies have investigated the concurrent validity of the CISS; however, those that have, have shown promising results. Endler and Parker (1990a) reported a strong and positive correlation between the *Task-Oriented* scale of the CISS and *Problem-Focused* subscale of the Ways of Coping Questionnaire (Folkman & Lazarus, 1988) ($r = .67$) and a moderate positive correlation between the *Task-Oriented* scale and *Problem-Focused* scale of the Coping Strategy Indicator (Amirkhan, 1990) ($r = .50$).

In a study of the psychometric properties of the Turkish version of the CISS with undergraduate students ($n = 729$), Boysan (2012) reported a high positive correlation between the *Task-Oriented* scale of the CISS and the *Active Coping* scale of the COPE (Carver et al., 1989) ($r = .65$) and a moderate positive correlation between the *Emotion-Oriented* scale of the CISS and *Behavioural Disengagement* scale of the COPE ($r = .58$). Both were significant at the $p < 0.01$ level.

In the absence of a recognised ‘gold standard’ coping measure with which to test the CISS, caution should be used when interpreting these figures; however, these correlations are above the .50 figure that Kline (2000) proposes as adequate for concurrent validity with an imperfect test.

Predictive validity (Criterion validity). Predictive validity is concerned with the ability of a test to be able to predict something about someone in the future (Kline, 2000). In this sense, measures of coping have generally been used in health settings to make predictions regarding an individual's future psychological and/or physical wellbeing. In relation to the CISS, the vast majority of validation studies have focused on its convergent and discriminant validity properties when correlated with measures of personality and psychological wellbeing as opposed to its ability to predict outcomes.

One study was found that investigated the ability of the CISS to predict depression in a sample of 298 patients with a primary diagnosis of major depressive disorder using DSM-IV (McWilliams et al., 2003). After controlling for demographic variables and personality, a regression model using the Beck Depression Inventory (BDI; Beck, Ward, Mendelson, Mock, & Erbaugh, 1961), as a measure of depression, found the *Emotion-Oriented* scale of the CISS the only predictor of depression in this sample. This could suggest that the *Emotion-Oriented* scale of the CISS is able to predict depression; however, the participants in this study had a current diagnosis of major depressive disorder so further research would be required to establish whether the CISS is able to predict depression in those with mild to moderate symptoms.

Construct validity. The factor structure of the CISS has received most interest from researchers exploring its reliability and validity. The original three-factor model established in Endler and Parker's initial validity study (Endler & Parker, 1990a) has been tested by several researchers across clinical and non-clinical samples using principal components analysis (PCA) and confirmatory factor analysis (CFA). The former is a statistical technique used to discover the constructs, or factors, of a set of observed

variables. The aim of PCA is to identify a factor model from the data (Kline, 1993). In comparison, CFA is a statistical technique used to validate, or confirm, an existing factor model (Kline, 1993). In the context of this chapter, researchers using PCA have sought to identify the factor structure of data collected using the CISS assessment tool. Those using CFA have sought to confirm that the three-factor model identified by Endler and Parker (1990a) fits with the data from their samples.

Whilst there has been agreement on the stability of the structure in that the tool measures the three coping styles it set out to measure, some data have had a better fit with a four-factor solution where the *Avoidance-Oriented* scale is separated into two unidimensional scales of *Social Diversion* and *Distraction* as opposed to being sub-scales. In a study with a large sample of healthy Japanese workers ($n = 1,268$), Watanabe, Yokoyama, and Furukawa (2015) reported support for the three-factor model using PCA accounting for 37.36% of the variance. This was supported by Cosway, Endler, Sadler, and Deary (2000) who reported a three-factor solution using PCA, accounting for 37.8% of the variance, in a sample of Scottish doctors and farmers ($n = 730$). Support for a three-factor model has also been reported in a clinical sample of patients ($n = 331$) with moderate to severe traumatic brain injury using Rasch PCA (Greene, Rapport, Millis, Hanks, & Williams, 2015). Support for the three-factor solution has therefore been received in clinical and non-clinical samples.

In studies using CFA, however, the data have preferred a four-factor solution with clinical and non-clinical samples (e.g., Boysan, 2012; Brands et al., 2014; Cook & Heppner, 1997; Hurt et al., 2011). According to Floyd and Widaman (1995), this should not be surprising as confirmatory models are difficult to cross validate when based on exploratory solutions accounting for a small amount of variance ($< 50\%$). Endler and

Parker's (1990a) validation study reports a variance of 37.5% thereby providing support for Floyd and Widaman's explanation.

Convergent validity (Construct validity). Convergent validity is shown when measures that should be theoretically related are in fact related (Kline, 1986). As previously mentioned, several studies have investigated the convergent validity of the CISS using measures of personality and psychological wellbeing.

The sub-scales of the CISS have been shown to correlate in expected ways with relevant personality traits. Using the Neuroticism Extraversion Openness-Five Factor Inventory (NEO-FFI; Costa & McCrae, 1992) and the CISS with a sample of Scottish doctors and farmers ($n = 721$), Cosway et al. (2000) reported significant positive correlations between the *Task-Oriented* scale of the CISS and *Extraversion* ($r = .24, p < .01$) and *Conscientiousness* ($r = .35, p < .001$). Furthermore, the *Emotion-Oriented* scale showed a significant and positive correlation with *Neuroticism* ($r = .63, p < .001$). The only significant result for any of the *Avoidance-Oriented*, *Social Diversion* and *Distraction* scales was a positive correlation between *Social Diversion* and *Extraversion* ($r = .23, p < .01$). Whilst the *Social Diversion* scale is an avoidant scale, its items are person-oriented so someone scoring high on *Social Diversion* would be a sociable individual which would fit with the correlation with *Extraversion*.

In relation to psychological wellbeing, Hurt et al. (2011) explored convergent validity with a sample of adults with Parkinson's disease ($n = 471$) using the Hospital Anxiety and Depression Scale (HADS; Zigmond & Snaith, 1983). Results were in the expected direction with significant positive correlations between the *Emotion-Oriented*

scale and the HADS *Anxiety* scale ($r = .648$) and *Depression* scale ($r = .451$), both at the $p < .01$ significance level.

Discriminant validity (Construct validity). Discriminant validity is demonstrated when measures that theoretically should not be related are, in reality, not related (Campbell & Fiske, 1959). Similar to convergent validity, discriminant validity has been tested through correlations with assessments of personality and wellbeing with outcomes being in the expected direction to demonstrate discriminant validity.

In their study with adults with Parkinson's disease, Hurt et al. (2011) demonstrated discriminant validity with the CISS *Task-Oriented* scale showing a significant negative correlation with the HADS *Anxiety* scale ($r = -.123$) and *Depression* scale ($r = -.201$), both at the $p < .01$ level. This result supports those of previous studies that have found significant negative correlations between the *Task-Oriented* scale and the HADS *Depression* scale (r s = from $-.20$ to $-.43$; Endler & Parker, 1999; Flett, Blankstein, & Obertynski, 1996; McWilliams et al., 2003).

In an investigation of personality traits, Endler and Parker (1999) reported a significant negative correlation between the *Social Diversion* scale of the CISS and *Social Introversion* on the Basic Personality Inventory (BPI; Jackson, 1989) for both males ($r = -.33, p \leq .01$) and females ($r = -.44, p \leq .01$). The *Task-Oriented* scale had significant and negative correlation with *Impulse Expression* for males ($r = -.24, p \leq .01$) and females ($r = -.27, p \leq .01$).

In summary, whilst there has been some disagreement amongst researchers as to whether the CISS should have a three- or four-factor solution, there is agreement that it has structural stability in that it measures the coping styles that it purports to measure.

Furthermore, a number of studies have demonstrated the ability of the CISS to correlate in expected ways with measures of personality and wellbeing. It can therefore be said that the CISS has good construct validity.

Content validity. Important factors for establishing content validity include the subject matter of the test being clear, having clear instructions for test-takers, and the test covering all aspects of the subject being tested (Kline, 1986). Kline comments that content validity mainly applies to tests of attainment and ability. As the CISS does not assess attainment or ability, it is perhaps not surprising that no literature was found exploring this aspect of validity.

In the development of the CISS, however, Endler and Parker (1990a) asked psychologists and psychology undergraduates to develop test items based on their knowledge of the literature, personal experience, and items in existing measures. Whilst this group of people may have had some knowledge of the field, it is not known how they were recruited or what their credentials were for the test developers to be confident they could generate a list of items to cover every aspect of the construct being measured.

Whilst the level of expertise of those that generated the items is unknown, the CISS is clear regarding the construct it measures and provides clear instructions for test takers. The CISS has, therefore, shown it meets two of the criteria for content validity.

Face validity. Face validity is concerned with how a test ‘looks’ to the test-taker. According to Kline, a test is said to have face validity “if it appears to be measuring what it claims to measure” (Kline, 2000, p.18). Whilst face validity can have advantages in that it

can increase a respondent's motivation to complete the test, if they can see the value in it, it can also have the disadvantage that it is open to false responding (Kline, 1993, 1998).

Socially desirable responding is a known problem with self-report measures and this can be especially true if it is clear what a test is measuring. No literature could be found exploring the face validity of the CISS; however, as already reported, the test instructions make it clear that the construct being measured is coping. Furthermore, inspection of the test items, for the most part, clearly show the behaviours that attempt to change the stressful situation and those suggesting a more passive response. For example, a *Task-Oriented* item is to "*Take corrective action immediately*", and an *Emotion-Oriented* item is to "*Become very upset*".

Some items on the *Avoidance-Oriented* scale could be said to lack face validity; for example, "*Think about the good times I've had*" and "*Talk to someone whose advice I value*". With the first item, it is difficult to see what style of coping this would fit under, indeed whether it is an item that would measure coping at all. Whilst the second item loads onto the *Social Diversion* scale for adults and undergraduates ($r = .34$, $r = .41$ respectively), it loaded onto the *Task-Oriented* scale for the psychiatric inpatient sample (Endler & Parker, 1990a). It is easy to see how this item would be a task-focused behaviour as opposed to an avoidant response to dealing with a stressful situation.

In summary, it can be said that the CISS has transparency in what it is measuring, and the majority of test items are transparent with the type of behaviour being assessed. It is therefore possible that the perceived, more socially desirable way of responding, could lead to distorted responses. An awareness of cultural differences is therefore important to consider when using and interpreting this test.

Standardisation and Norms

Norms are a set of scores from a test given by a specific, clearly defined, sample of respondents (Kline, 2000). Norms are important as they give the test psychological meaning as, without them, it is not possible to know what a score means for the respondent. The size of the sample being used to develop norms, and its representativeness of the target population, are clearly important factors (Kline, 2000). Kline suggests a sample size of 500 is more than adequate to reduce standard errors.

As part of the test development, the CISS has been standardised and provides separate norms for men and women in samples of English speaking North-American adults ($n = 249$ males; $n = 288$ females), undergraduates ($n = 471$ males; $n = 771$ females) and psychiatric inpatients ($n = 164$ males; $n = 138$ females). Norms are also available for males in a correctional institution ($n = 124$).

According to Kline, then, only the female undergraduate sample is of sufficient size to reduce the risk of standard errors to an acceptable level. Furthermore, it is not clear how representative the samples are of the target populations. Simple demographics such as educational and socio-economic background are unknown. This is an important point as research has demonstrated that higher levels of education and socio-economic status can predict greater use of adaptive, and lower use of maladaptive, coping strategies for both adults and adolescents (Chenube & Omumu, 2011; Iqbal & Nishat, 2017; Roohafza et al., 2009). It is positive that a normative sample has been provided for use in a forensic setting; however, there are clear caveats in its use due to the very small sample size.

Conclusion

The review has shown that the CISS has a well-designed interval scale with appropriate norm groups. There are caveats, however, with respect to sample size for the norms and a lack of clarity in how representative they are of the target population. This review has also demonstrated that, overall, the assessment can be considered to have good validity and internal consistency, although it performs less well in relation to test-retest reliability.

The main concern with the test is the potentially problematic construction of the *Avoidance-Oriented* scale. This scale has demonstrated only adequate internal consistency and has performed poorly with respect to test-retest reliability (Endler & Parker, 1990a). This scale has also created inconsistency across studies examining factor structure, with the PCA method of factor analysis preferring a three-factor solution and the CFA method preferring a four-factor solution, where the *Avoidance-Oriented* scale is separated into two unidimensional scales: *Social Diversion* and *Distraction*. The four-factor solution would appear to make more sense as these two scales are measuring different approaches to avoidance. Furthermore, the four-factor solution is preferred when testing the original three-factor model.

Despite concerns over the reliability of the *Avoidance-Oriented* scale, the CISS can be considered a valid assessment of coping styles. It has conceptually meaningful factors and is user friendly, with fewer items and scales than other coping measures, which facilitate administration and interpretation (Cook & Heppner, 1997). Given these points, the CISS can be considered suitable for use in forensic settings with the ability to provide a contribution to clinical and research practice; however, in view of concern over test-retest reliability, caution should be applied if using the instrument as a pre and post assessment of

treatment effectiveness. In the context of research, it was noted in Chapter 3 (see p. 154) that the CISS could be used in future research to measure the cognitive and behavioural coping styles of prison officer negotiators.

CHAPTER 5

DISCUSSION

The aims of this thesis were to: 1. Increase the knowledge base of the experience of CINs, specifically in relation to stress, coping, and their use of support; and 2. To expand current knowledge of negotiating to that of a prison setting. To achieve these aims, three distinct pieces of work have been completed, the main findings of which will be summarised here. The chapter will conclude with reflections on the strengths and limitations of the thesis, implications for practice, and recommendations for further research.

Chapter 2: Systematic Literature Review

Chapter 2 presents a systematic review of the extant literature pertaining to the coping styles, and negotiation-related experiences of stress, coping, and mechanisms of support for CINs. It was a key finding from the review that there is a dearth of empirical research in this area. Despite an extensive search of the extant literature, just seven studies were identified that met the inclusion criteria for the review. The earliest peer-reviewed study was published in 2015 (Grubb et al., 2015) indicating that research interest in this field has only recently occurred.

The review found that CINs are generally more likely to use adaptive and problem-focused coping strategies, and less likely to use maladaptive strategies, when compared to norms on psychometric tests (Grubb et al., 2015; Young, 2016). There was consistency in findings across these two studies that, when compared to norms, CINs are more likely to: accept what has happened; think about how they can solve the problem; attach a positive meaning to the event for personal growth; play down the seriousness of the event; and apportion blame for what they have experienced onto others. Findings were inconsistent with regards to: refocusing thoughts onto more pleasant matters; catastrophising the

experience; and rumination. However, it was not clear whether the differences between the US (Young, 2016) and UK samples (Grubb et al., 2015) were true, or could be explained by the use of a modified questionnaire or use of different norms between the studies.

A number of stressors were identified which included: a fear of poor performance; scrutiny from others; an inquiry into the incident; and a lack of operational discipline (Grubb, 2016; Sachs, 1996; Spence & Millott, 2016). The experience of negotiation-related stress was identified as being on a continuum from negative stress, including PTSD symptoms, through to positive/beneficial stress (Bohl, 2001; Grubb, 2016; Spence & Millot, 2016; Terhune-Bickler, 2005). This was a key finding as it is at odds with the non-empirical literature which discusses negotiation-related stress only in negative terms. The most important strategies for coping with incident-related stress were identified as: debriefing procedures; self-reflection; humour; externalising responsibility for negative outcomes; avoiding negative feelings; and using skills/knowledge acquired through training (Bohl, 2001; Grubb, 2016; Sachs, 1996; Terhune-Bickler, 2005). It was not clear, however, which strategies were used during, or after, an incident.

Negotiator coping strategies, found in this review, show some consistency with the broader psychological literature; for example, the role of communication (e.g., debriefing procedures) has shown to play an important role in reducing stress for ambulance and medical workers (Alexander & Klein, 2001; Vorell & Carmack, 2014). Further, job-specific skills training and education has been shown to reduce occupational stress (Folwell & Kauer, 2018) and to be effective in avoiding negative thoughts and feelings in emergency health workers (Folwell & Kauer, 2018; Regehr, Goldberg, & Hughes, 2002). Further, the use of humour to cope with difficult situations has been shown across many contexts (Alexander & Klein, 2001; Brcic, Suedfeld, Johnson, Huynh, & Gushin, 2018;

Dowling, 2002; Tracy et al., 2006). The benefits of social support, found in the current review, were consistent with findings from studies with similar professions (Bakker et al., 2016; Prati & Pietrantonio, 2010).

A further key finding from the review was the narrow focus in participant characteristics of the included studies. Participant samples were limited to US and UK police negotiators, with females and those from a black, Asian and minority ethnic (BAME) background under-represented.

Chapter 3: Empirical Research Study

Taking forward a recommendation from Chapter 2, Chapter 3 presents an empirical study which widens the focus of the existing literature to exploring the experiences of negotiators working in a prison setting. A qualitative methodology utilised semi-structured interviews to gather rich data from 14 prison officer negotiators. The data were analysed using inductive thematic analysis (Braun & Clarke, 2006) and five themes were identified that answered the research questions: '*Characteristics of Incidents*'; '*Stressors*'; '*Experience of Stress*'; '*Coping Strategies*'; and '*Support Mechanisms*'.

The study identified that self-harming behaviours were the most difficult to deal with as they seemed to invoke an emotional response not experienced by other types of incident. It is possible that the presence of other stressors, that can co-occur in some incidents involving self-harm (i.e., being deployed as a lone negotiator and poor management of the scene), increase those negative feelings. An important finding was the identification of the cognitive demands of the role acting as a stressor yet also associated with positive thoughts and feelings. This experience acted as a motivator for many negotiators to remain in the role.

The key findings from this study are those that appear to differentiate negotiation in a prison setting to those managed by the police in the community. The most notable finding was the identification of the prison regime as a contributing factor to: triggering serious incident behaviour; stress for the negotiator; and acting as a barrier to negotiators accessing some coping and support mechanisms. It was identified that not all negotiation incidents in a prison setting fall within a crisis or conflict definition. It has been suggested that a third type of behaviour is observed which can be described as disruptive. In these situations there is no confrontation, strong emotional expression, threats of harm, or demands. The behaviour is most likely goal-oriented to alleviate boredom, or achieve excitement, possibly as a consequence to an unstimulating regime.

Role ambiguity was identified as a stressor in lone deployments. This stressor has not been identified with police negotiators. It is suggested that this could be explained by prison officers dealing with serious incidents, within the same environment, every day as part of their general prison officer role. The ambiguity occurs when a single negotiator is asked to attend an incident due to their negotiator status, although no negotiation systems are in place. In these situations, the negotiator can be unsure whether they are expected to work as a negotiator or to treat the incident as any non-negotiator trained prison officer would.

A further key finding was that, in contrast to the commonplace use of social support by participants in the studies within the systematic review, most participants in this study chose not to use social support outside of co-workers. This was due to 'outsiders' not sharing the common language of prisons, making conversations more difficult, and from not wanting their partners to worry. Importantly, a help-seeking stigma was identified where it seemed culturally acceptable to accept help but not to ask for it.

Chapter 4: Critique of Psychometric Measure

Following the empirical study, a recommendation was made for future research to quantitatively examine negotiator coping styles. As such, Chapter 4 examined the psychometric properties of the Coping Inventory for Stressful Situations (Adult Version) (CISS; Endler & Parker, 1999) as a potential coping measure for such research.

The critique identified that the CISS generally has good validity and internal consistency. It performs less well, however, in relation to test-retest reliability, with studies finding correlations lower than expected (e.g., Endler & Parker, 1990a). The main criticism of the CISS is the unconvincing construction of the *Avoidance-Oriented* scale. This scale is responsible for inconsistencies in studies examining factor structure, when using PCA and CFA methods for factor analysis. The *Avoidance-Oriented* scale also performs least well in validity and reliability studies. Despite concerns over this scale, overall, the CISS can be considered a valid assessment of general coping styles. It could therefore be used to measure the coping style of negotiators.

Strengths and Limitations of the Thesis

This thesis has made an important contribution to the literature by drawing together and synthesising the extant literature examining the coping style, and negotiation-related experiences of stress, coping strategies, and support for CINs. The review identified gaps in knowledge so that further research could be directed. Taking forward some of those recommendations, the empirical study has made a further important contribution by being the first study to explore the experiences of negotiators working in a prison setting. The study identified that the sources and experience of stress are similar to those of police officer negotiators; however, as noted in Chapter 3 (pp. 143-149), a key difference with

prison negotiation is the impact of operating within the requirements of the prison regime. This is necessary so that the prison can continue to operate as it should. The overarching difficulty is the pressure to resolve an incident as soon as possible so that all prison officers can return to their required place of work. This is important so that, for example, meals can be served, colleagues can be released to go home, and prisoners can attend their education/work/exercise activities. For negotiators, the pressure to operate the prison regime can impact on their availability to attend a debrief should they be required to immediately return to their prison officer duties. This is a finding that, until now, has not been recognised in the literature.

The limitations of Chapters 2 and 3 have already been discussed; however, key limitations to the thesis will be noted here. The systematic literature review did not include non-English language studies and only one researcher extracted the data, potentially introducing language bias and unintentionally omitting relevant data during the data extraction exercise. Whilst the sample size for the empirical study is good for qualitative research, it is still not possible to generalise the findings across the wider prison officer negotiator population. However, as prisons across England and Wales adopt the same procedures for dealing with negotiation situations, and many participants in the current study having worked in prisons across England, it could be surmised that similar findings may be obtained from negotiators working in other England and Wales PSPs. Further, including a validated assessment of situation-based coping strategies would have strengthened the findings of the empirical study in view of participants finding it difficult to identify those that they use.

Implications for Practice

Taking together the findings from this thesis, the following recommendations are made with respect to practice:

- In view of the finding that the actions of non-negotiator trained colleagues can contribute to stress, a recommendation for training is made. Training on the role of the negotiator should be available to all staff who are not directly involved in negotiations regarding how they can best support their negotiator colleagues. In addition, it would be beneficial for managers to receive training on the role of negotiators in lone deployments and how to manage the scene of an incident. Grubb (2016) also identified the benefits of such training in research completed with police negotiators.
- A number of stressors were identified during the course of negotiations though there was a lack of awareness of the coping strategies adopted to manage them. Further, the empirical study identified that some negotiators are not aware of how the role might be impacting negatively upon them and help-seeking stigma may prevent some negotiators from seeking support. Help-seeking models purport that recognising there is a problem/need for support is crucial for the help-seeking process to be triggered (Murray, 2005; Sato et al., 2017). It has also been suggested that a failure to recognise signs and symptoms of mental health difficulties delays help-seeking, highlighting early identification is key to accessing timely support (Gulliver, Griffiths, & Christensen, 2010). A recommendation is therefore made to provide training in stress management and understanding the normal reactions to experiencing a traumatic event. Training should include: understanding the types of thoughts, feelings/emotions one might experience when under stress and

identifying cognitive and behavioural strategies to manage them; information on the normal reaction to trauma; and signs to be aware of that seeking support would be beneficial. Education about the signs and symptoms of mental health difficulties for police officers has been shown to be beneficial (Mishara & Martin, 2012).

- Given the finding that staff are unlikely to ask for help/support, Care Teams should be informed of the benefits of re-approaching negotiators in the days following a critical/serious incident. To address the lack of awareness of the specific support services available, this information (e.g., critical incident debriefing and counselling) and how to access those services, should be provided. As recommended by Terhune-Bickler (2005), consideration could be given to introducing mandatory psychological ‘health checks’ for negotiators.
- The benefits of receiving a post-incident debrief are clearly identified across the thesis; however, the empirical study identified that not all staff had the opportunity to attend a debrief and they were not provided with a debrief session following a lone deployment. Debriefs by the silver commander were greatly valued. It is therefore recommended that: all staff are afforded the opportunity to attend a debrief; a debrief is provided following a lone deployment; and silver commanders hold a separate negotiator debrief. The benefits of post incident debriefing, following events in the workplace, have been shown across different professions (Basham, Appleton, & Dykeman, 2000; Keene, Hutton, Hall, & Rushton, 2010; Kinzel & Nanson, 2000).
- Whilst all negotiators engage in self-reflection, they do not have the opportunity to discuss learning as a negotiator team. A recommendation is therefore made for the introduction of local negotiator team meetings to share best practice, discuss

learning from recent incidents, and check-in on one another. The benefits of region-wide and national meetings could also be explored. Group meetings and networks of support were identified as beneficial in police negotiator research (Grubb, 2016). They have also shown to have a positive impact for first responders in learning emotional management strategies from peers (Regehr, Hill, Knott, & Sault, 2003; Scott & Myers, 2005).

- Given the concern over legal scrutiny, and lack of formal record keeping identified in the empirical study, a recommendation is made to formalise record keeping from the perspective of the negotiator. The importance of keeping good records of negotiation incidents was also noted by Grubb (2016) with a police negotiator sample.

Directions for Future Research

Whilst there is a substantial body of literature in the wider field of critical incident negotiation (e.g., Slatkin, 2010; van Hasselt, Romano, & Vecchi, 2008), this thesis has identified that research specifically exploring the experiences of CINs is less well established. This is especially true regarding negotiation in prison settings and there is much scope for further work.

Future research could compare the general coping style of negotiators against their incident-related coping strategies. This would be helpful to inform the content of training in stress management. As noted in Chapter 3, the CERQ (Garnefski et al., 2002) could be used to measure cognitive coping and the CISS and CISS: SSC (Endler & Parker, 1999) used to measure cognitive and behavioural coping. The construct of stress could be examined using a validated measure to improve the method used by Bohl (2001). Folkman

and Moskowitz's (2000, 2004) model of stress could be tested by examining if there is a correlation between how a negotiator appraises an incident (as a threat or as a challenge) and their experience of stress (negative and/or positive). The findings could help to explain the findings of Grubb (2016), and the empirical study in this thesis, that some negotiators view negotiation as a cognitive challenge and that some do not find negotiation especially stressful. Again, the findings could assist in the development of stress management training. The focus of all this research could be widened to examine stress and coping for other roles involved in critical incident management. The rationale for this being that each role within the critical incident management team has its own responsibilities. It is, therefore, reasonable to surmise that the stressors for other roles (e.g., silver commander and intervention team members) might be different to those identified by negotiators. Previous research has also highlighted that silver commanders and intervention teams are more likely to want to resolve an incident as speedily as possible (usually by tactical intervention), while the priority for negotiators is to resolve the incident peacefully, no matter how long that might take (Vecchi, 2006). These conflicting approaches can lead to tension amongst the wider critical incident management team, as negotiators can feel under pressure to resolve the incident quickly (Strentz, 2012; Vecchi, 2006). An understanding of the stressors for the silver commander and intervention team would be helpful to share with the wider team so as to increase understanding, identify any areas for change in how incidents are managed, and to potentially reduce frustration, or tension, among the team (Grubb, 2016; Vecchi, 2006).

Qualitative research could replicate the work of Ireland et al. (2014) to explore the motivation of the perpetrators of critical/serious incident behaviour. In addition, the work of McNeill et al. (2018a) could be replicated to explore the function of critical/serious

incident behaviour. The findings would assist in the management of incidents and, particularly in prison settings, the findings could be used to identify individual and environmental risk and protective factors to incidents occurring.

Finally, it was noticed that there was a low proportion of negotiators from BAME backgrounds in the participant samples of the studies included the systematic review. Further, no participants from a BAME background were included in the empirical study. Due to lack of information on the ethnicity of non-respondents in these studies, it is not known whether this can be explained by a low representation of BAME police and prison officers that have the opportunity to train as negotiators, or whether BAME officers are less likely to train as negotiators. This finding is worthy of further exploration so that teams of negotiators can be demographically representative of the communities (community or prison-based) within which they work.

Conclusion

This thesis has achieved its aims by furthering knowledge of the experiences of CINs and the settings in which they work. A key contribution to the evidence-base is an understanding of negotiation in prisons and how this is similar, and different, to police negotiation. Further, the empirical study has also made a valuable contribution to the occupational literature by highlighting negotiation as an important part of prison officer work. Negotiators are clearly an essential resource to the peaceful resolution of critical and serious incidents. It is hoped that the recommendations for practice, made here, will be considered to improve the incident-related experience and psychological wellbeing of this invaluable group of staff.

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APPENDICES

Appendix A

Search Syntax and Results of Database Searches

All searches were conducted on 30th July 2017

1.1 *PsycINFO (OVID) 1967 to Present*

1	(negotiat\$ adj2 police).ti,ab,id,hw,sh.	44
2	(negotiat\$ adj2 “law enforcement”).ti,ab,id,hw,sh.	25
3	(negotiat\$ adj2 prison\$).ti,ab,id,hw,sh.	46
4	(negotiat\$ adj2 correction\$).ti,ab,i,hw,sh.	9
5	(negotiat\$ adj2 jail\$).ti,ab,id,hw,sh.	0
6	(negotiat\$ adj2 hostage\$).ti,ab,id,hw,sh.	124
7	(negotiat\$ adj2 crisis).ti,ab,id,hw,sh.	87
8	(negotiat\$ adj2 critical).ti,ab,id,hw,sh.	49
9	(negotiat\$ adj2 serious).ti,ab,id,hw,sh.	9
10	(negotiat\$ adj2 suicid\$).ti,ab,id,hw,sh.	9
11	(negotiat\$ adj2 barricade\$).ti,ab,id,hw,sh.	3
12	(negotiat\$ adj2 kidnap\$).ti,ab,id,hw,sh.	8
13	stress\$.ti,ab,id,hw,sh.	231086
14	anxi\$.ti,ab,id,hw,sh.	17810
15	trauma\$.ti,ab,id,hw,sh.	92169
16	PTSD.ti,ab,id,hw,sh.	27257
17	impact\$.ti,ab,id,hw,sh.	294408
18	pressure\$.ti,ab,id,hw,sh.	57937
19	upset\$.ti,ab,id,hw,sh.	2406
20	consequence\$.ti,ab,id,hw,sh.	121648
21	cope\$.ti,ab,id,hw,sh.	25901
22	coping.ti,ab,id,hw,sh.	74626
23	manag\$.ti,ab,id,hw,sh.	284597

24	“deal\$ with”.ti,ab,id,hw,sh.	71000
25	personality.ti,ab,id,hw,sh.	209392
26	“emotion\$ regulation”.ti,ab,id,hw,sh.	12632
27	support\$.ti,ab,id,hw,sh.	552278
28	care.ti,ab,id,hw,sh.	330893
29	help\$.ti,ab,id,hw,sh.	278274
30	provision.ti,ab,id,hw,sh.	30530
31	assist\$.ti,ab,id,hw,sh.	111391
32	exp STRESS/	94425
33	exp COPING BEHAVIOR/	43273
34	exp SOCIAL SUPPORT/	31833
35	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12	302
36	13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 32	811807
37	21 or 22 or 23 or 24 or 25 or 26 or 33	617778
38	27 or 28 or 29 or 30 or 31 or 34	1070066
39	36 or 37 or 38	1896737
40	35 and 39	187
41	limit 40 to yr=“1977-Current”	186
42	limit 41 to English Language	183
43	limit 42 to (peer reviewed journal and all journals and human)	94

94 Results

1.2 Web of Science 1900 to Present

Citation Indexes used: Science Citation Index Expanded (SCI-EXPANDED) (1900-Present)

Social Sciences Citation Index (SSCI) (1900-Present)

Arts & Humanities Citation Index (A&HCI) (1975-Present)

Limit: Timespan=1977-2017

#1 4,852,178 TS=(stress* or anxi* or trauma* or PTSD or impact* or pressure* or upset* or consequence*)

#2 2,180,846 TS=(cope* or coping or manag* or “deal* with” or personality or “emotion* regulation”)

#3 3,861,902 TS=(support* or care or help* or provision or assist*)

#4 9,180,212 #3 OR #2 OR #1

#5 333 TS=((negotiat* near/2 (police or “law enforcement” or prison* or correction* or jail* or hostage* or crisis or critical or serious or suicid* or barricade* or kidnap*)))

#6 163 #5 AND #4

#7 161 (#5 AND #4) AND LANGUAGE: (English)

#8 151 (#5 AND #4) AND LANGUAGE: (English) Refined by: [excluding] DOCUMENT TYPES: (REVIEW OR NOTE OR BOOK CHAPTER OR EDITORIAL MATERIAL)

151 Results

1.3 ProQuest Databases

Seven ProQuest Databases were searched using the following search strategy:

((ab,ti((stress*) OR (anxi*) OR (trauma*) OR (PTSD) OR (impact*) OR (pressure*) OR (upset*) OR (consequence*)) OR ab,ti((support*) OR (care) OR (help*) OR (provision) OR (assist*)) OR ab,ti((cope*) OR (coping) OR (manag*) OR ("deal* with") OR (personality) OR ("emotion* regulation")))) AND ab,ti(negotiat* NEAR/2 (police OR "law enforcement" OR prison* OR correction* OR jail* OR hostage* OR crisis OR critical OR serious OR suicid* OR barricade* OR kidnap*)))

Available limits relevant to the inclusion/exclusion criteria were then applied to each database. The limits and results for each database are detailed below:

National Criminal Justice Reference Service (NCJRS) Abstracts (1975-Present)

Results from search before limits applied = 311

Results from search when limits applied:

Date [1st January 1977 to 30th July 2017] = 288

Language [English] = 287

Source type [Exclude] Books; Reports; Magazines = 256

256 Results

Criminal Justice Database (1981-Present)

Results from search before limits applied = 105

Results from search when limits applied:

Language [English] = 105

Source type [Exclude] Magazines; Wire Feeds = 96

96 ResultsApplied Social Sciences Index and Abstracts (ASSIA) (1987-Present)

Results from search before limits applied = 36

Results from search when limits applied:

Language [English] = 36

36 ResultsSocial Science Database (1911-Present)

Results from search before limits applied = 74

Results from search when limits applied:

Date [1st January 1977 to 30th July 2017] = 74

Language [English] = 74

Source type [Exclude: Newspapers; Magazines; Wire Feeds] = 65

65 ResultsSociological Abstracts (1952-Present)

Results from search before limits applied = 95

Results from search when limits applied:

Date [1st January 1977 to 30th July 2017] = 88

Language [English] = 75

75 Results

Social Services Abstracts (1979-Present)

Results from search before limits applied = 11

Results from search when limits applied:

Language [English] = 11

11 Results

ProQuest Dissertation and Theses Global (1861-Present)

Results from search before limits applied = 150

Results from search when limits applied:

Date [1977 - 2017] = 150

Language [English] = 144

Source type [Include] Full text only = 115

Include [Subjects] Criminology; Sociology; Social Psychology; Negotiations; Psychology; Clinical Psychology; Behavioural Psychology; Correctional Institutions; Hostage Negotiations; Prisoners; Prisons; Criminal Justice; Crisis Intervention; Domestic Violence = 44

44 Results

Appendix B

Selection and Screening Tool

Reference:		
	Inclusion criteria...	Exclusion criteria...
Sample	<input type="checkbox"/> Critical / Crisis incident negotiators (to include situations of hostage; barricade; suicide threat; domestic incidents; concerted indiscipline)	<input type="checkbox"/> Business negotiators <input type="checkbox"/> Government negotiators <input type="checkbox"/> Political international negotiators (not hostage related)
Phenomenon of Interest	<input type="checkbox"/> General coping style <i>OR</i> <input type="checkbox"/> Negotiation related coping strategies <i>OR</i> <input type="checkbox"/> Negotiation related stress <i>OR</i> <input type="checkbox"/> Negotiation related support mechanisms	<input type="checkbox"/> Coping strategies unrelated to negotiation situations <input type="checkbox"/> Stress unrelated to negotiation situations <input type="checkbox"/> Support mechanisms unrelated to negotiation situations <input type="checkbox"/> Negotiator tactics and strategies <input type="checkbox"/> Negotiator training
Design	<input type="checkbox"/> <i>Qualitative</i> : Questionnaire; survey; interviews; focus groups <i>OR</i> <input type="checkbox"/> <i>Quantitative</i> : Psychometric test or questionnaire to assess coping, stress or support mechanisms	<input type="checkbox"/> No empirical data collection methods used
Evaluation	<input type="checkbox"/> <i>Qualitative</i> : Themes; views; experiences; attitudes; opinions <i>OR</i> <input type="checkbox"/> <i>Quantitative</i> : Outcome measure from psychometric or questionnaire	<input type="checkbox"/> No empirical data analysis methods used
Research type	<input type="checkbox"/> Qualitative <input type="checkbox"/> Quantitative <input type="checkbox"/> Mixed-Methods	<input type="checkbox"/> Narrative reviews; book chapters; editorials; commentaries
Publication type	<input type="checkbox"/> Published peer reviewed <input type="checkbox"/> Published un-reviewed <input type="checkbox"/> Unpublished doctoral theses	<input type="checkbox"/> Unpublished below doctorate level dissertations and theses
Language	<input type="checkbox"/> English	<input type="checkbox"/> Any other language
Date Range	<input type="checkbox"/> 1977 to 2017	<input type="checkbox"/> 1976 and prior
Decision	<input type="checkbox"/> Accept for quality appraisal	<input type="checkbox"/> Reject

Appendix C

Full-Text References Excluded Following Application of the Selection and Screening Tool

Reference	How the citation was identified	Reason for exclusion
Allen, S., Fraser, S., & Inwald, R. (1991). Assessment of personality characteristics related to successful hostage negotiators and their resistance to posttraumatic stress disorder. In J. Reeve, J. M. Horn, & C. Dunning (Eds.), <i>Critical incidents in policing revised</i> (pp. 1–16). Washington, DC: U.S. Government Press.	Search of electronic databases	Did not fit inclusion criteria for ‘Phenomenon of Interest’ – assessment of PTSD not specific to negotiation related incidents
Bohl, N. K. (1992a). Hostage negotiator stress. <i>FBI Law Enforcement Bulletin</i> , 61(8), 23-26.	Search of electronic databases	Did not fit inclusion criteria for ‘Research type’ – reference is a commentary
Forester, J. (2004). Responding to critical moments with humor, recognition, and hope. <i>Negotiation Journal</i> , 20(2), 221-237.	Search of electronic databases	Did not fit inclusion criteria for ‘Research type’ – reference is a commentary
Gelbart, M. (1979). <i>Psychological, personality and biographical variables related to success as a negotiator</i> (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global. (Order No. DP24640)	Manual search of reference lists	Did not fit inclusion criteria of ‘Sample’ – the sample was CINs in-training

Gettys, V. S. & Elam, J. D. (1988). Identifying characteristics of hostage negotiators, and using personality data to develop a selection model. In J. Reese & J. Horn (Eds.), <i>Police Psychology: Operational Assistance</i> (pp. 159-172). Retrieved from https://www.ncjrs.gov/pdffiles1/Digitization/130933NCJRS.pdf	Manual search of reference lists	Did not fit inclusion criteria of 'Phenomenon of Interest' – psychometrics did not assess coping, stress, or support
Grubb, A., & Brown, S. (2012). Hostage (crisis) negotiation: The potential role of negotiator personality, decision-making style, coping style and emotional intelligence on negotiator success. <i>International Journal of Emergency Mental Health</i> , 14(1), 41-55.	Search of electronic databases	Did not fit inclusion criteria for 'Research type' – reference is a narrative review
Hammer, M. R., Van Zandt, C. R., & Rogan, R. G. (1994). Crisis/hostage negotiation team profile. <i>FBI Law Enforcement Bulletin</i> , 63(3), 8-11.	Search of electronic databases	Did not fit inclusion criteria for 'Sample' –no data specifically for CINs
Mirabella, R. W., & Trudeau, J. (1981). Managing hostage negotiations - An analysis of 29 incidents. <i>Police Chief</i> , 48(5), 45-47.	Search of electronic databases	Did not fit inclusion criteria for 'Evaluation' - no empirical data analysis method used
Needham, J. P. (1977). <i>Neutralization of prison hostage situations</i> . Huntsville, Texas: Institute of Contemporary Corrections and the Behavioral Sciences, Sam Houston State University.	Search of electronic databases	Did not fit inclusion criteria for 'Sample' – data not specific to CINs
Nieboer-Martini, H. A., Dolnik, A., & Giebels, E. (2012). Far and away: Police negotiators on overseas deployments. <i>Negotiation and Conflict Management Research</i> , 5(3), 307-324.	Search of electronic databases	Did not fit inclusion criteria for 'Phenomenon of Interest' – exploration of the practical experiences of

		negotiating abroad
Regini, C. (2002). Crisis negotiation teams: Selection and training. <i>FBI Law Enforcement Bulletin</i> , 71, 1-5.	Manual search of reference lists	Did not fit inclusion criteria of 'Research type' – authors provide an opinion on desirable competencies and characteristics of a CIN
Reiser, M., Saxe, S. J., & Swerling, J. (1982). Psychological assessment of barricaded suspect and hostage negotiators. In M. Reiser (Ed.), <i>Police psychology - Collected papers</i> (pp. 116-123). Los Angeles: LEHI Publishing Company.	Search of electronic databases	Did not fit inclusion criteria for 'Sample' – police officers who have applied to be trained as a CIN
Rosenbluh, E. S. (2001). Preventing intervener burnout. <i>Journal of Police Crisis Negotiations</i> , 1(1), 119-132.	Search of electronic databases	Did not fit inclusion criteria for 'Research type' – reference is a commentary
Russell, H. E., & Zuniga, R. (1986). Special stress factors in hostage/barricaded situations when the perpetrator is a police officer. In J. T. Reese & H. A. Goldstein (Eds.), <i>Psychological services for law enforcement</i> (pp. 515-520). Washington, DC: U.S. Government Printing Office.	Search of electronic databases	Did not fit inclusion criteria for 'Research type' – reference is a commentary
Schlossberg, H. (1980). Values and organization in hostage and crisis negotiation teams. <i>Annals of the New York Academy of Sciences</i> , 347, 113-116.	Search of electronic databases	Did not fit inclusion criteria for 'Research type' – reference is a commentary

Stratton, J., & Knowles, G. (1978). Police department psychologist. <i>International Criminal Police Review</i> , 33(320), 210-212.	Search of electronic databases	Did not fit inclusion criteria for 'Research type' – reference is a commentary
Terhune-Bickler, S. D. (2004). Too close for comfort: Negotiating with fellow officers. <i>FBI Law Enforcement Bulletin</i> , 73(4), 1-5.	Search of electronic databases	Did not fit inclusion criteria for 'Research type' – reference is a commentary
Terestre, D. J. (2004). Talking him down. <i>Police</i> , 28(3), 26-33.	Search of electronic databases	Did not fit inclusion criteria for 'Research type' – reference is a commentary
Tucker, A. S., Spaulding, T., Henry, J., & Van Hasselt, V. B. (2007). Critical incident stress management in a mid-sized police department: A case illustration. <i>International Journal of Emergency Mental Health</i> , 9(4), 299-304.	Search of electronic databases	Did not fit inclusion criteria for 'Evaluation' – no empirical data analysis method used
Van Aelstyn, M. A. (2007). <i>Crisis negotiations: An evaluation of perceived characteristics that facilitate the successful conclusion of crisis situations</i> (Doctoral dissertation). Retrieved from ProQuest Dissertations & Theses Global: Social Sciences. (304756993).	Search of electronic databases	Did not fit inclusion criteria for 'Phenomenon of Interest' – focus is on the influence of education, training, and experience on CIN effectiveness
Van Aelstyn, M. A. (2007). Crisis negotiation teams. <i>TELEMASP Bulletin</i> , 14(4), 1-7.	Search of electronic databases	Did not fit inclusion criteria of 'Phenomenon of Interest' – the survey asks questions related to the

		development, deployment, and implementation of crisis negotiation teams, and the education and training of primary CINs
van den Heuvel, C., Alison, L., & Power, N. (2014). Coping with uncertainty: Police strategies for resilient decision-making and action implementation. <i>Cognition, Technology & Work</i> , 16(1), 25-45.	Search of electronic databases	Did not fit inclusion criteria of 'Sample' – used police officers who were in-training to be involved in hostage situations in the future
Wardlaw, G. (1982). The Psychologist's role in hostage negotiations. In G. Wardlaw (Ed.), <i>The Role of Psychologists in the Criminal Justice System. Papers Presented at Training Project No. 38</i> (pp. 123-132).	Search of electronic databases	Does not fit the inclusion criteria of 'Research type' – reference is a commentary

Appendix D
Quality Appraisal Tool for Qualitative Studies

Reference:

Screening Questions

1. Was there a clear statement of the aims of the research? <i>Consider: what is the goal of the research and why is it important?</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
2. Is a qualitative methodology appropriate? <i>Consider: if the research seeks to interpret or illuminate the actions and/or subjective experiences of research participants</i>	<input type="checkbox"/> Yes	<input type="checkbox"/> No
3. is it worth continuing?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Detailed questions to assess bias

Questions	Scores			Can't Tell (CT)	Comments
	Yes (2)	Partial (1)	No (0)		
Appropriate research design					
1. Was the research design appropriate to the aims of the research? <i>Consider: if the researcher has justified the research design</i>					
Sampling					
2. Was the recruitment strategy appropriate to the aims of the research? <i>Consider: if the researcher has explained how the participants were selected; why the participants selected were the most appropriate; if there is any discussion around recruitment e.g., why some chose not to take part</i>					
Data collection					

<p>3. Were the data collected in a way that addressed the research issue?</p> <p><i>Consider: if the setting for data collection was justified; if it is clear how data were collected; if the researcher has justified the methods chosen and if they are explicit e.g., if using interviews is there any information on how these were conducted; if the form of data is clear; if the researcher has discussed saturation of data</i></p>					
Reflexivity (research partnership relations/recognition of researcher bias)					
<p>4. Has the relationship between researcher and participants been adequately considered?</p> <p><i>Consider: if the researcher critically examined their own role, potential bias, and influence during: formulation of research questions; data collection, including sample recruitment, and choice of location; how the researcher responded to events during the study and whether they considered the implications of any changes in the research design</i></p>					
Ethical issues					
<p>5. Have ethical issues been taken into consideration?</p> <p><i>Consider: if there are sufficient details of how the research was explained to participants for the reader to assess whether ethical standards were maintained; if the researcher has discussed issues raised by the study e.g., informed consent, confidentiality, and how they handled the effects of the study on participants during and after the study</i></p>					
Data analysis					
<p>6. Was the data analysis sufficiently rigorous?</p> <p><i>Consider: if there is an in-depth description of the analysis process; is it clear how themes/categories were arrived at; whether the researcher explains how the data presented were selected from the</i></p>					

<i>original sample to demonstrate the analysis process; to what extent contradictory data were taken into account</i>					
7. Are there sufficient data to support the themes?					
8. Did the researcher critically examine their own role, potential bias, and influence during the analysis and selection of the data for presentation?					
Findings					
9. Is there a clear statement of findings? <i>Consider: if the findings are explicit; if there is adequate discussion of the evidence both for and against the researcher's arguments; if the researcher has discussed the credibility of their findings e.g., triangulation, respondent validation, more than one analyst</i>					
10. Are the findings discussed in relation to the original research questions?					
Value of the research					
11. How valuable is the research? <i>Consider: if the researcher discusses the contribution the study makes to existing knowledge or understanding e.g., current policy or practice; if they identify new areas where research is necessary; if the researchers have discussed whether, or how, the findings can be transferred to other populations or considered other ways the research may be used</i>					

Quality score: /22

Number of 'Can't Tell' items:

Percentage:

Appendix E

AXIS Quality Appraisal Tool for Cross-Sectional Studies

	Question	Yes	No	Don't know
Introduction				
1	Were the aims/objectives of the study clear?			
Methods				
2	Was the study design appropriate for the stated aim(s)?			
3	Was the sample size justified?			
4	Was the target/reference population clearly defined? (Is it clear who the research was about?)			
5	Was the sample frame taken from an appropriate population base so that it closely represented the target/reference population under investigation?			
6	Was the selection process likely to select subjects/participants that were representative of the target/reference population under investigation?			
7	Were measures undertaken to address and categorise non-responders?			
8	Were the risk factor and outcome variables measured appropriate to the aims of the study?			
9	Were the risk factor and outcome variables measured correctly using instruments/measurements that had been trialled, piloted or published previously?			
10	Is it clear what was used to determine statistical significance and/or precision estimates? (e.g., p-values, confidence intervals)			
11	Were the methods (including statistical methods) sufficiently described to enable them to be repeated?			
Results				
12	Were the basic data adequately described?			
13*	Does the response rate raise concerns about non-response bias?			
14	If appropriate, was information about non-responders described?			
15	Were the results internally consistent?			
16	Were the results presented for all the analyses described in the methods?			
Discussion				
17	Were the authors' discussions and conclusions justified by the results?			
18	Were the limitations of the study discussed?			
Other				
19	Were there any funding sources or conflicts of interest that may affect the authors' interpretation of the results?			
20	Was ethical approval or consent of participants attained?			

Source: Downes, M. J., Brennan, M. L., Williams, H. C., & Dean, R. S. (2016). Development of a critical appraisal tool to assess the quality of cross-sectional studies (AXIS). *BMJ Open*, 6(12), 1-7.
doi:10.1136/bmjopen-2016-011458

Total number of 'Yes' =

Total number of 'No' =

Total number of 'Don't know' =

* 'No' is a positive response for this question and so is included in the 'Yes' count

Appendix F
Data Extraction Form

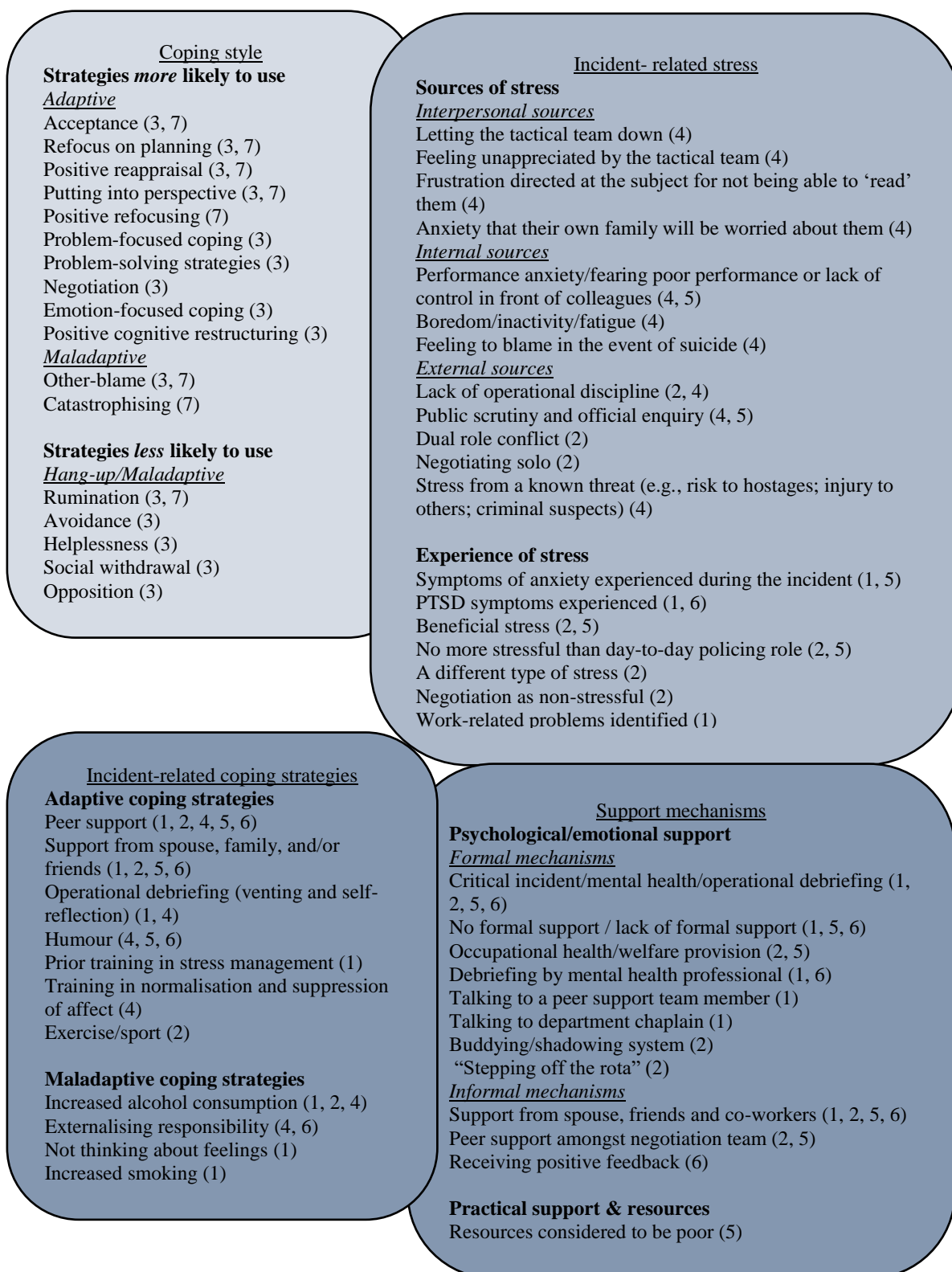
General information	
Title of Study	
Author(s)	
Year of publication	
Country of study	
Study Characteristics	
Design/type of study and study aims	
Measure(s) relevant to the review questions/data collection method(s)	
Standardisation, validity and reliability of measure(s)	
Participant Characteristics	
Primary occupation/negotiation contexts	
Sample size and gender mix	
Age range, mean and standard deviation	
Ethnicity	
Years active as a negotiator	

Number of incidents attended	
Method of recruitment	
Response rate	
Study Results (in relation to the review questions)	
Analysis method(s) used	
Findings and significance (quantitative)	<u>Coping style(s)</u>
	<u>Sources of stress</u>
	<u>Experience of incident-related stress</u>
	<u>Incident-related coping strategies</u>
	<u>Support mechanisms available</u>
	<u>Negotiator views of the support mechanisms</u>

Themes / key concepts relevant to the review questions (qualitative)	<u>Sources of stress</u>	
	<u>Experience of incident-related stress</u>	
	<u>Incident-related coping strategies</u>	
	<u>Support mechanisms available</u>	
	<u>Negotiator views of the support mechanisms</u>	
Conclusions		
Quality Assessment		
Quality assessment score – quantitative (out of 20)		
Quality assessment score – qualitative (out of 22)		
Reviewed by second psychologist	Yes <input type="checkbox"/> Agreement reached on scores <input type="checkbox"/>	No <input type="checkbox"/>

Appendix G

Concept Map of the Narrative Synthesis



Note: Numbers in brackets refer to the study number in Table 2.

Appendix H

Summary of the Quality Assessment of the Included Qualitative Studies

Article	Quality Assessment Criteria											Total Score	Quality Score
	1	2	3	4	5	6	7	8	9	10	11		
Grubb (2016)	Y	Y	Y	P	Y	Y	Y	Y	Y	Y	Y	21	95%
Sachs (1996)	Y	Y	P	P	P	Y	CT	Y	Y	P	Y	16	73%
Spence & Millott (2016)	Y	P	Y	N	P	N	CT	N	P	P	P	9	41%
Terhune-Bickler (2005)	Y	P	Y	N	Y	P	Y	N	P	P	P	13	59%

Notes: 1) Was the research design appropriate to the aims of the research? 2) Was the recruitment strategy appropriate to the aims of the research? 3) Were the data collected in a way that addressed the research issue? 4) Has the relationship between researcher and participants been adequately considered? 5) Have ethical issues been taken into consideration? 6) Was the data analysis sufficiently rigorous? 7) Are there sufficient data to support the themes? 8) Did the researcher critically examine their own role and potential bias and influence during the analysis and selection of the data for presentation? 9) Is there a clear statement of findings? 10) Are the findings discussed in relation the research questions? 11) How valuable is the research?

Y = Yes, P = Partial, N = No, CT = Can't Tell

Maximum score is 22

Article	Quality Assessment Criteria																				Total Score	Quality Score
	1	2	3	4	5	6	7	8	9	10	11	12	13*	14	15	16	17	18	19*	20		
Bohl (2001)	Y	Y	N	Y	Y	Y	N	N	N	Y	Y	Y	Y	N	DK	Y	Y	N	DK	DK	10	50%
Grubb, Brown, & Hall (2015)	Y	Y	N	Y	Y	Y	N	Y	Y	Y	Y	Y	DK	N	Y	Y	Y	Y	N	Y	16	80%
Young (2016)	Y	Y	N	Y	Y	Y	N	Y	Y	Y	Y	N	DK	N	DK	Y	Y	Y	DK	Y	13	65%

Notes: 1) Were the aims/objectives of the study clear? 2) Was the study design appropriate for the stated aim(s)? 3) Was the sample size justified? 4) Was the target/reference population clearly defined? 5) Was the sample frame taken from an appropriate population base so that it closely represented the target/reference population under investigation? 6) Was the selection process likely to select subjects/participants that were representative of the target/reference population under investigation? 7) Were measures undertaken to address and categorise non-responders? 8) Were the risk factor and outcome variables measured appropriate to the aims of the study? 9) Were the risk factor and outcome variables measured correctly using instruments/measurements that had been trialled, piloted or published previously? 10) Is it clear what was used to determine statistical significance and/or precision estimates? (e.g., p-values, confidence intervals) 11) Were the methods (using statistical methods) sufficiently described to enable them to be repeated? 12) Were the basic data adequately described? 13)* Does the response rate raise concerns about non-response bias? 14) If appropriate, was information about non-responders described? 15) Were the results internally consistent? 16) Were the results presented for all the analyses described in the methods? 17) Were the authors' discussions and conclusions justified by the results? 18) Were the limitations of the study discussed? 19)* Were there any funding sources or conflicts of interest that may affect the authors' interpretation of the results? 20) Was ethical approval or consent of participants attained?

Y = Yes, N = No, DK = Don't know

* Reverse score

Maximum score is 20

Appendix J

Details of the Researcher Designed Questionnaire in the Study by Bohl (2001)

The questionnaire is described in the published article as gathering information on: **details about the suicide incident** (six symptoms of anxiety were presented for participants to tick which they had experienced); **formal sources of support after the incident** (categorised as mental health professional; peer support team member; and department chaplain) by rating how helpful the support had been on scale of 1 (*Not at all helpful*) to 4 (*Very helpful*); **informal support after the incident** (categorised as co-worker; supervisor; administrator; and investigator) was rated on a scale from 1 (*No support*) to 4 (*A great deal of support*); how they felt about departmental procedures post incident was rated as 1 (*Very negative*) to 5 (*Very positive*). Twenty-five possible PTSD symptoms and 11 possible work-related problems were presented to assess any **long-term effects of the incident**. Participants were asked to rate the severity of their reactions on a scale of 1 (*It had only a mild effect on my life, coping ability and functioning on the job*) to 10 (*It had a severe effect on my life, coping ability and functioning on the job*). Participants also rated the duration of the reaction on a scale of 1 (*One month or less*) to 5 (*Over one year*); **the individual's own coping mechanisms** were assessed by asking participants which coping mechanisms they had used from a list of 12 positive and three negative coping mechanisms; **resolution of feelings** was assessed by asking participants when they had first talked thoroughly about the incident on a scale of 1 (*Within the first day*) to 9 (*Still have not talked about it thoroughly with anyone*).

Appendix K

Example E-mail to Governing Governor

Dear [Governor]

I am writing to request your permission to approach your negotiators to see if they would be willing to take part in a research study I'm undertaking for my doctorate degree.

The aim of the study is to explore the experiences of prison officer negotiators. I'm particularly interested in how they experience stress when negotiating, how they cope and what their support/after care needs are. I've been a negotiation advisor for 14 years so am aware of the difficult situations that negotiators may deal with. Currently there is no known research in this area and, particularly with the number of incidents increasing, I'm hoping the study will identify any training needs to help negotiators cope with stress and ensure they have access to the right type of support so as to prevent burnout.

I am requesting access to negotiators in all NW prisons, so to maintain industrial relations, I am writing to the NW Regional POA representative to inform them of the study and request their support.

The research has been approved by HMPPS National Research Committee (please see letter attached). The impact on your resources would be a one-hour interview with each negotiator who consents to take part and use of an office to conduct the interview. I would contact your Head of Security to request the names of your negotiators and also ask their permission to bring in a digital dictaphone to record the interviews.

I have attached the 'Participant Information' sheet that I would send to negotiators for further information on the study.

Thank you in advance for considering this request.

Kind regards,

Catharine

Catharine Booth | Senior Registered Forensic Psychologist



Appendix L

Introductory E-mail to Potential Participants

Dear [insert name]

I am conducting a piece of research exploring the experiences of prison officer negotiators and would like to invite you to take part.

I have attached a 'Participant Information Sheet' which provides details of the study to help you decide if you'd like to take part.

As you may know, I've been a negotiation advisor for many years and so see first-hand the various demands placed on you as negotiators. From my own observations of being involved in the wider team resolving serious incidents, I have a genuine interest in understanding what the experience is like from the negotiator's point of view– the people at the coalface.

I have not found any research which has investigated this prison officer role. This means that little, if anything, is known about this important work that prison officers do.

My aim for this research is to give negotiators a voice to talk about the work they do and their experiences. It is hoped that the outcome of the study will contribute to training development and provide any support services/systems that would be helpful, as identified by negotiators themselves.

I'd be very grateful if you would take a couple of minutes to read about the study and please do contact me if you have any questions at all.

Kind regards,

Catharine Booth

Senior Registered Forensic Psychologist



Appendix M

Participant Information Sheet

Study title: Exploring the experiences of prison officer negotiators in Her Majesty's Prison and Probation Service

What is the purpose of this study?

The aim of this study is to explore the experiences of prison officer negotiators, how they cope with those experiences, what their support needs are and how well these are being met.

Why have I been asked to take part?

You have been asked to take part as you are a trained prison officer negotiator and I would like to talk with you about your experiences in this role.

What will I be asked to do if I take part?

You will be asked to take part in one interview with the researcher about your experiences of being a negotiator. The interview would be arranged at a time and place that is convenient for you.

The interview should take around one hour but it will be responsive to you so may be longer or shorter depending on what you would like to say.

Prior to the interview you will be asked to sign a consent form to confirm that you agree to take part in the study. With your consent, the interview will be audio-recorded using a dictaphone. This is only so the researcher can accurately capture everything you have said.

Do I have to take part?

No. If you choose not to take part, this will not affect your role as a negotiator or your employment in any way.

If you do decide to take part, you are free to change your mind and cease participation in the study at any time during the interview and at any time up to one week from the date of the interview. After this time your interview will have been included in the analysis.

If you do change your mind, you do not need to give a reason why. The researcher will ensure that any information you have provided will not be used in the study. Your audio-recording will be deleted and all paper information will be shredded. There will be no negative consequences for you if you change your mind.

What are the benefits of my taking part?

To the researcher's knowledge there is no published research on the negotiator role performed by UK prison officers. This means that very little is known about the work you do. Taking part in this research will help in the understanding of the experiences of prison officer negotiators, potentially contributing to the development of training and addressing any gaps in the provision of support systems/services.

What are the disadvantages or risks of my taking part?

There may be some questions which ask you to discuss an event that was particularly upsetting for you. You can decline to answer any question at all during the interview. You will be debriefed at the end of the interview by the researcher and will have the opportunity to ask any questions.

Will my taking part in the study be kept confidential?

Your name will never be revealed in any report about this study. Your name will be written on the consent form you sign and you will then be assigned a pseudonym name; for example, 'Participant 1'. The researcher will have a list of participant names with their pseudonym name written next to it. All other information (written and audio) will only have your pseudonym name on it.

Only the researcher and her supervisor, Dr Zoe Stephenson at the University of Birmingham, will have access to the information you provide. The information will be kept confidential and secure in the following ways:

Interview audio-recording will be saved onto the University of Birmingham's secure IT system and then immediately deleted from the dictaphone. The interview will be typed up and anonymised.

Information saved electronically (the list of participant names and pseudonyms and interview transcript) will be saved on the University of Birmingham's secure IT system.

Written information (the anonymised typed up interview transcript and consent form) will be stored in a locked filing cabinet in the researcher's locked office at [REDACTED] only the researcher has a key to the filing cabinet.

The information sheet (this requests your gender, age, ethnicity and length of service – you do not need to answer any question you do not want to) will be shredded as soon as the information has been saved onto the University of Birmingham's secure IT system. This will be within 48 hours of the interview.

The data from the interviews will be used to identify themes from what has been said by everyone interviewed. Some extracts from interviews will be used to illustrate key points but care will be taken not to use extracts that will enable individuals to be identified. Any extracts used will be attributed to pseudonym names only.

In line with the University of Birmingham's policy, the information you provide will be securely stored for 10 years. After this time, it will be destroyed by shredding and deleting.

What happens when the research stops?

A report will be written which identifies the common themes reported by the interviewees about the experiences of being a negotiator. The report will be included in a thesis that the researcher is submitting for assessment for a doctorate degree at the University of Birmingham.

A shortened version of the report will be submitted to [REDACTED]

[REDACTED]
[REDACTED]
[REDACTED] It is possible that

the report will be distributed further by these parties.

The findings may also be presented in an internationally published journal. You will not be identified as a participant in any of these reports.

Who has commissioned this research?

This research is entirely the researcher's own idea and work. Whilst HMPPS has funded the degree qualification, it has not commissioned the study and no one else in HMPPS will have any involvement in its completion. The study is being supervised by Dr Zoe Stephenson at the University of Birmingham. Dr Stephenson has no affiliation with HMPPS.

Thank you for taking the time to read about this study and please do contact me should you have any questions at all about it.

If you would like to take part, can I request that you please contact me by [insert deadline].

Thank you

Catharine Booth

Researcher contact details:

Catharine Booth

Senior Registered Forensic Psychologist

[REDACTED]
[REDACTED]

Supervisor contact details:

Dr Zoe Stephenson

Lecturer in Forensic Psychology

University of Birmingham

[REDACTED]
[REDACTED]

Appendix N
Demographic Information Sheet

Participant pseudonym: _____

1. Are you... (please tick one that applies)

- ☐ Male
- ☐ Female
- ☐ I prefer to describe my gender in a different way
- ☐ I prefer not to answer

2. How long have you been a prison officer? years and months

3. How long have you been a negotiator? years and months

4. How old are you? years and months

5. How would you describe your ethnicity? (Please tick the one that applies)

- ☐ I prefer not to answer

White	
English / Welsh / Scottish / Northern Irish / British	
Irish	
Gypsy or Irish Traveller	
Mixed / Multiple ethnic groups	
White and Black Caribbean	
White and Black African	
Any other Mixed / Multiple ethnic background, please describe	
Asian / Asian British	
Indian	
Pakistani	
Bangladeshi	
Chinese	
Any other Asian background, please describe	
Black / African / Caribbean / Black British	
African	
Caribbean	
Any other Black / African / Caribbean background, please describe	
Other ethnic group	
Arab	
Any other ethnic group, please describe	

Appendix O

Semi-Structured Interview Questions

TO OPEN THE INTERVIEW

- Introduce myself and check the participant understands the aims of the study and what they are consenting to.
- Both parties to sign the consent form/discuss any concerns.
- Structure expectations in terms of how long the interview may take and to let me know if they need to take a comfort break.
- Ask if they have any questions before we start.

MAIN INTERVIEW QUESTIONS (prompts will be used to gather more information)

- What attracted you to the negotiator role?

Operational experiences:

- How many incidents would you say you've attended in total?
- What kind of incidents have you attended and how many of each? (gather a picture of their experience)
- How many incidents have you attended in the last 12 months (how many of those in the last 6 months)?
- What kind of incidents were they?

Stressors and coping with stressors during an incident:

- How well did the basic negotiator training help to prepare you for the role?
 - Having done the role now for....do you think the training could be improved?
 - Would you add anything or take anything out of it?

Thinking about attending incidents...

- What kind of thoughts start going through your head when you get a call to attend an incident? Can you describe the feeling/s you get when you get a call?
 - How do you cope with them?
- Do the thoughts or feelings differ depending on the type of incident you've been called to?
- Which role in the negotiator team do you find most difficult (1, 2 or 3)?
 - What is it about that role that makes it the most difficult for you?
 - What kind of thoughts are going through your head when you're in that role?
 - How does it make you feel?
 - What have you thought or told yourself at the time to help manage those thoughts so you can do the job?
 - Has it helped?

- How well would you say the incident team work together as a whole team?
 - How could they work better together?
- What's the most stressful/difficult part about being a negotiator? (when doing the job and in general)
- How do you keep yourself calm when negotiating?
 - What strategies do you use?
- How does the experience of stress as a negotiator compare to what you experience in your day-to-day job?

Coping after an incident:

- Generally, what kind of thoughts and feelings do you have immediately after an incident (say first couple of hours)?
 - What strategies do you use to manage them? (mentally and behaviourally)
 - Do you think you get enough time or opportunities to 'come down'?
- Do you do anything perhaps later in the day or the following day to help cope with the 'aftermath'? (Reduce stress, recurring thoughts or heightened emotions)
 - What strategies do you use? (mentally and behaviourally)
 - Has the way you cope with the 'aftermath' changed as you've got more experienced?
- Generally, how long would you say an incident stays in your mind? (intrusive thoughts or flashbacks related to it)
 - Does it bother you?
 - How do you cope with it? (mentally and behaviourally)
- Can you describe the incident that sticks most in your mind?
 - How long ago was it?
 - What is it about that incident that makes it stick in your mind?
 - What strategies did you use to keep yourself calm so you were able to do the job?
 - In what ways is it still 'with you'? (thoughts, images, things that trigger it etc.)
 - Does it bother you?
 - Have you spoken to anyone about it? If not, why not?
- Does the way you think or feel after an incident differ depending on how it was resolved - through negotiation or intervention?
- Do you think about your own performance as a negotiator after an incident?

Support:

- What happens after an incident has ended in terms of debriefing?
- How satisfied are you with the support/care negotiators get from the prison service? (the type – physical and psychological - and amount)
 - What would you like to see available?
- Are you aware of the Care Team and the Employee Assistance Programme?
 - Would you use them if you felt you wanted to off load/speak to someone?
 - If no, why not?
- If you did need to off load, are you more likely to speak to someone inside or outside of the service?
 - Why is that?
- How could the organisation (local or national) encourage negotiators to use the support services that are currently available?

Finally:

- What do you enjoy about the negotiator role?
- Would you recommend the role to other people?

CLOSING THE INTERVIEW

- Is there anything that you would like to add about your role as a negotiator to what we have already discussed?
- Thank the participant and provide information on when the finished report is expected to be completed.
- Give the participant the debrief sheet and ask if they have any questions.
- Remind the participant of the date they'll need to inform me if they wish to withdraw their data.

Appendix P

Participant Debrief Sheet

Study title: Exploring the Experiences of Prison Officer Negotiators in Her Majesty's Prison and Probation Service

Thank you for taking part in an interview with me for the above study. Your contributions are greatly valued and will help widen the understanding of this vital role that prison officers do.

The aim of this study is to explore the experiences of prison officer negotiators. Of particular interest is their experience of stress, how they cope with the demands of the role and whether their after-care and support needs are sufficiently met.

The data obtained from all the interviews will be analysed and themes will be identified in relation to the above areas of interest. The findings will be presented in a report for the researcher's doctorate degree, HMPPS managers, and the POA.

The findings from this study will help HMPPS managers and policy-makers understand the experiences of negotiators when undertaking this role. It is hoped that the outcome will provide a basis for any training development and support needs identified by negotiators.

If you would like to withdraw your interview from the study please let the researcher know within one week of today. This is because after this date your data will have been included in the overall analysis.

If you choose to withdraw your interview from the study there will be no negative consequences at all. If you have any concerns that the researcher has been unable to address you can contact her supervisor on the details below.

If you would like to receive a copy of the report please contact the researcher on any of the contact methods below.

Should this interview have raised any difficult issues for you, you can discuss this with the researcher now or contact the Care Team or Employee Assistance Programme on the contact details below. You may also speak to your line manager.

Once again, thank you for taking the time to participate in this study - your contributions are very much appreciated.

Researcher contact details:

Catharine Booth

Senior Registered Forensic Psychologist

[REDACTED]

Supervisor contact details:

Dr Zoe Stephenson

Lecturer in Forensic Psychology

University of Birmingham

[REDACTED]

Staff support contact information

Staff Care Team:

Contact details for your local team are available on your establishment's intranet home page and from the People Hub

Employee Assistance Programme:

Available 24 hours a day, 7 days a week

[REDACTED]

Your line manager

Appendix Q

Consent Form

Title of the project: Exploring the Experiences of Prison Officer Negotiators in Her Majesty's Prison and Probation Service

I confirm that (please tick):

- ☐ I confirm that I have read and understood the 'Participant Information Sheet' for the above study. I have had the opportunity to consider the information, ask any questions and these questions have been answered satisfactorily.
- ☐ I understand that my participation is voluntary and I am free to withdraw from the research at any time up to one week after signing this form, without giving a reason.
- ☐ My interview will be audio-recorded so the researcher has an accurate record of what I say. I understand that only the researcher and possibly her supervisor, Dr Zoe Stephenson, will hear the recording and know my name.
- ☐ I understand that my interview will be transcribed and only the researcher and her supervisor will have sight of the anonymised transcript.
- ☐ My audio-recording and transcribed interview will be labelled with a pseudonym name. The researcher will only be able to work out which interview is mine by looking at their list of participant names that map against the pseudonym. Without this list, it will not be possible for anyone else to identify my interview.
- ☐ The storage and destroying of paper records and the audio-recording have been explained to me as detailed in the 'Participant Information Sheet'.
- ☐ I understand that what is discussed during interview may be used to prepare a research report being submitted to the University of Birmingham as part of the researcher's doctorate degree. The research report, or a shortened version, will be available to the parties listed in the 'Participant Information Sheet' and may be published in an academic journal in the future.
- ☐ I understand that my name will not be included in any reports or publications about the study and any quotations used will not identify me personally.
- ☐ I agree to take part in the above study.

Name of participant

Date

Signature

Name of researcher

Date

Signature

Appendix R

Orthographic Notation System from Braun and Clarke (2013, p. 165-166)

Feature	Notation and explanation of use
The identity of the speaker; turn-taking in talk	<p>The interviewee's allocated pseudonym followed by a colon (e.g., Jane:) indicates it is them that is speaking. CB: indicates it is the interviewer speaking.</p> <p>A new line is started every time a new speaker enters the conversation.</p>
Laughing	<p>((laughs)) indicates a speaker laughing during a turn of talk.</p> <p>((laughter)) indicates both interviewee and interviewer laughing at the same time.</p>
Pausing	((pause)) indicates a long pause of a few seconds or more.
Spoken abbreviations/vernacular usage	<p>Use abbreviations only if someone speaks that abbreviation.</p> <p>Only the very obvious vernacular usage will be transcribed as spoken (e.g., 'cos' instead of 'because'). Regional accents will be transcribed as 'standard' English for confidentiality (e.g., 'Alreet' will be transcribed 'Alright').</p>
Use of punctuation	<p>Use commas where not doing so would change the meaning of the data extract.</p> <p>Use a question mark to signal a question.</p>
Non-verbal utterances	Should be recorded (e.g., 'erm', 'er', 'mmm').
Spoken numbers	Spell out spoken numbers.
Cut off speech and speech sounds	Type out the words you hear phonetically, followed by a dash (e.g., 'wa-, wu-)
Emphasis on particular words	Indicate words or sounds that are particularly emphasised by underlining (e.g., <u>word</u>).
Reported speech	Use inverted commas to signal: an apparent verbatim account of the speech (or thoughts) of another person; their interviewees account of their own speech in the past) (e.g., and I said, 'I can't do anything for you while you're up there').

Names of prisoners, staff, and prisons Location in the prison	<p>Replace names with [name of perpetrator] or [name of another prisoner] or [pseudonym name of participant] or [name of another negotiator] or [name of another staff member] or [home establishment] or [another establishment].</p> <p>Replace location in the prison to an appropriate alternative (e.g., 'A Wing' to 'R Wing'; 'education' to 'workshop').</p>
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Appendix S

Process of the Data Analysis using Thematic Analysis (Braun & Clarke, 2006)

To allow for a better understanding of how the data were managed and themes identified, a more detailed account of the data analysis process is provided here.

Step 1. Familiarising yourself with the data

I conducted all the interviews which allowed me to become familiar from the very beginning. Immediately following each interview I made notes on my reflections of the interview and my thoughts on the themes that were present, particularly those relevant to the research questions. I also transcribed each interview which gave me another opportunity to familiarise myself with the data.

Following transcription, I further “immersed” (Braun & Clarke, 2012, p. 60) myself in the data by reading each interview twice in hardcopy. The second time I read the interview I began to make notes in the margins of the transcript with brief descriptions about what was being said, or what I had interpreted was being said; for example, “has a drink when gets home”, “tiring”, “feels helpless”. I used different coloured pens to make these notes having assigned a colour to each research question – at this stage some notes had more than one colour indicating that a chunk of data appeared to cut across the concepts of interest (stress, coping, and support). I subsequently made a second, more detailed, summary of the points of interest in each transcript using the different coloured pens. This was to clearly highlight the frequency of references to each concept for each participant.

Step 2. Generating initial codes

In keeping with an inductive thematic analysis, the data were coded using the complete coding process where all data that might be relevant to the research questions were coded using a brief phrase that captured the essence of the data extracts (Braun & Clarke, 2012). This was achieved using NVivo 11 Plus software and systematically working through each transcript line by line. Data extracts were identified as short as one sentence long to several lines of data. Both descriptive (semantic) and interpretative (latent) codes were identified. At this stage it was not uncommon for a data extract to be given more than one code. I was particularly conscious of identifying contradictory, as well as corroborating, evidence both within and across interviews to minimise bias and get a full picture of the participants' experiences (Braun & Clarke, 2013). This was a recursive process where the codes were regularly reviewed against the data extracts attached to them and, where appropriate, merged with other codes, or split into separate codes and re-labelled. This process continued until all the data had been coded.

Step 3. Searching for themes

This phase involved organising the identified codes into initial themes. This was done manually by writing each code on a separate index card, collecting similar codes together and organising them into potential themes. I also used flipchart paper and different coloured pens to create diagrams of how the codes seemed to fit together into hierarchical themes and for the data set as a whole, using a concept map. I noticed that some codes were very similar and so reviewed the data extracts again and was able to merge some codes together. Some codes did not obviously 'sit' with any other codes and, on reflection, some were not relevant to the research questions - these codes were organised into a

miscellaneous category. Eventually, I had identified six distinct themes, each with sub-themes and an underpinning theme that ran through all the themes and all the transcripts. The data extracts were stored in NVivo within their respective code(s).

Step 4. Reviewing potential themes

Braun and Clarke (2012) report that this phase is about quality checking the analysis conducted thus far. The first step is to check whether the theme works in relation to the data. On doing so I was satisfied that each overarching theme had a central organising concept and worked with the codes; however, I considered that some sub-themes were weak as they were not supported by sufficiently rich data or the label of the sub-theme did not accurately reflect the data. An example of this was the sub-theme ‘Indifference’ as an experience of stress. On reviewing the data extracts, the sub-theme was re-labelled ‘Not stressful... or is it?’. Weak sub-themes were discarded.

The second step was to review the themes in relation to the entire data set. I reflected somewhat on a theme I had labelled “I wish I’d done it years ago” which highlighted participants’ perceived personal and professional benefits/rewards of conducting the negotiator role. Whilst I was satisfied that there was sufficiently rich data to support the theme, it was not relevant to answering the current research questions. I had wanted to include this theme as it demonstrated the positive impact the role had despite the difficulties experienced. After much reflection and reviewing the guidance from Braun and Clarke “to ensure that your themes capture the meaning of the dataset *in relation to your research question*” (Braun & Clarke, 2013, p. 234), I removed this theme from the current study. I am to prepare a summary report of this research for HMPPS and it is my intention to include this theme to inform stakeholders of the perceived benefits of this role by staff.

At the end of this phase, five themes had been identified as having distinct organising concepts which were also relevant to the research questions. These themes worked with their respective sub-themes, codes, and data extracts.

Step 5. Defining and naming themes

During this phase I wrote a short description to explain the essence of each theme. This process also acted as a further quality check to ensure each theme was coherent and distinct from the others. Some sub-themes were re-named at this point; for example, ‘Positive Stress’ was re-named ‘Positive Affect’ (in the ‘Experience of Stress’ theme) and ‘Legalities’ was re-named ‘Legal Scrutiny’ (in the ‘Stressors’ theme). The data extracts were printed in hardcopy from NVivo and analysed to identify the “story of the data” (Braun & Clarke, 2013, p. 252). A narrative presenting the analysis was prepared and data extracts were selected that I felt best illustrated my interpretation of the data. The research report was written concurrently with this phase.

Step 6. Producing the report

In keeping with the realist methodology adopted for his study, a more descriptive form of thematic analysis was undertaken. The analysis of the data is presented around the data extracts which are used as illustrative examples of the analysis. In line with the recommendations of Braun and Clarke (2006, 2013), frequency counts were not used when reporting the data analysis (i.e., “8 participants thought...”). This is because interviews are fluid and flexible in nature, meaning participants do not discuss exactly the same issues. As such, it cannot be assumed that because a participant did not mention something during interview that it is not relevant to them (Braun & Clarke, 2013). In addition, the

importance of a theme does not necessarily correlate with the number of participants who contribute to it but whether it captures something important in relation to the research question (Braun & Clarke, 2006). As an alternative, expressions such as, “the majority of participants...” (Meehan, Vermeer, & Windsor, 2000, p. 372) and “many participants...” (Taylor & Usher, 2001, p. 298) were used.

Appendix T

Researcher Reflexive Statement

Wilkinson (1988) recommends functional and personal reflexivity during the process of qualitative research. Functional reflexivity refers to the way(s) the research tools and process may have influenced the research while personal reflexivity is concerned with bringing the researcher into the research. The reflective journal I maintained through conducting the research was used to record decisions and reflections related to both functional and personal matters. I considered personal reflections to be particularly important given my interest and position in the research. I will briefly discuss these here to place the research into context, so the reader can be mindful of how these may have influenced the findings.

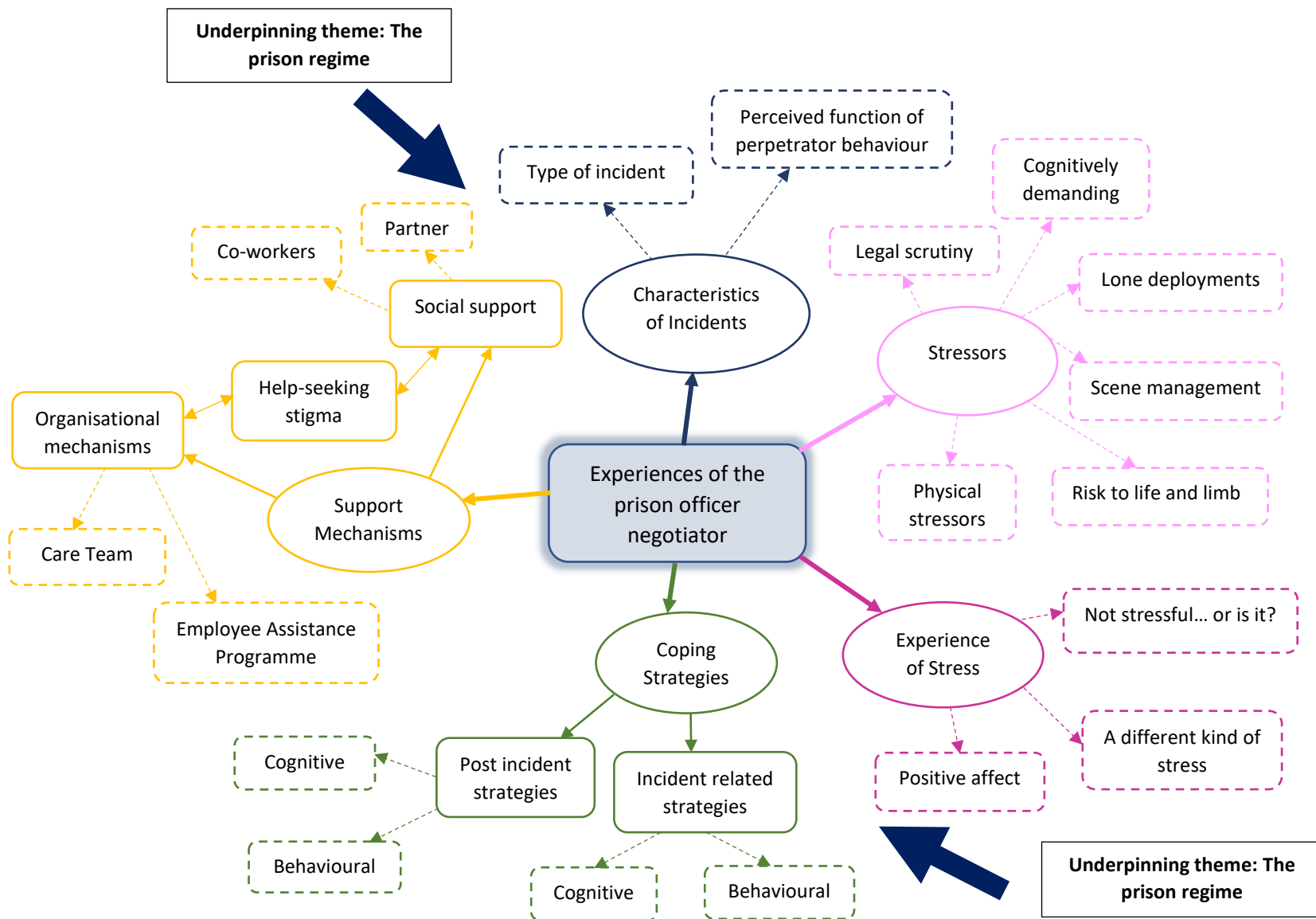
I have been a full-time employee of HMPPS for 21 years and have been a trained negotiation advisor for 15 of those years. Over the years I have worked at numerous serious incidents both in the command suite and on scene with negotiators. Naturally, I have developed my own views and perspectives of the negotiator role from my observations and interactions with negotiator staff. It is my personal experiences that piqued my interest in conducting research in this area, particularly when I could not locate any published research with this group.

As a negotiation advisor I can experience stress when attending incidents and so I started this study with the view that negotiators would also find it stressful. As a matter of course, following the resolution of an incident, I will ask the negotiator team if they would like some time to “catch up”/have a negotiator debrief with myself. I have been surprised at how infrequently this offer has been taken up, particularly as I have received feedback that there is often not enough support for negotiators after incidents. I had wondered what

the reasons for declining the opportunity of a debrief might be: wanting to get home after a long incident; perceived stigma of a debrief with a psychologist; not feeling like they need a debrief; or is it the wrong type of support? Again, I was making an assumption that negotiators would want, perhaps even need, a separate debrief.

I used the reflexive journal to document my thoughts at each stage of the research in a conscious effort to remain mindful of how my background, biases, beliefs, assumptions, and experiences may influence the decisions I make and my interpretation of the data. Strategies I used to manage this were: basing the interview questions on the literature, where available; using prompts to gain further information about a topic rather than making assumptions (e.g., “Can you tell me more about that?”); presenting myself as inquisitive and recognising the participant as the expert; extracting data during the analysis that contradicted my assumptions; regularly reviewing the names of codes against data extracts as a quality check; and using supervision with my supervisor, and peer supervision with colleagues, as a place to reflect.

I believe I was able to manage my personal biases well throughout the process which I attribute to my being genuinely open to learning about what the experience was like for the participants. I was not at all concerned by wanting to ‘prove’ that my assumptions were correct, and I believe this is evidenced by some of the findings, particularly in relation to the participants’ experience of stress.



Appendix U
Thematic Map